深圳市通普科技有限公司
SHENZHEN TOP TECHNOLOGY CO., LTD

售 后 服 务 手 册
AFTER-SALE SERVICE MANUAL

深圳市宝安区福永镇和平村同富裕工业区 5 栋
Building 5, tongfuyu industrial zone, FuYong Town
BaoAnDistrict, Shenzhen, GuangDong, China.
Tel.: +86-755-27696378/27696332
Tel line : 075529772136or dial 4006606398
Fax: +86-755-27696383

深圳市通普科技有限公司

Shenzhen Top Technology Co.,Ltd.

BROCHURE

PICTURE OF LED DISPLAY & PARTS·····

Controllers……
Cables……
Installation tools and attachment……
LED display & parts……
Optionalequipments……

PRODUCTS INSPECTION.....

THE INSTALLATION OF LED DISPLAY·····

Confirmation of installation type……
The process of LED Display installation……

CONTROLLING SYSTEM DEBUGGING·····

LINSN manual……
Z-DEC manual……
DPSTAR manual……
Xixun manual……
Liyan manual ……

INTRODUCTION OF SYSTEM ABOUT LED DISPLAY·····

Connection drawing of Multi-functional cards……
Manual of video processor……
Fiber sending & receiving controller……
Power cabinet for LED display……

THE USAGE, MAINTENANCE AND SAVING OF LED DISPLAY·····

The usage and maintenance of LED Display.....
The saving of LED Display……

REPAIR OF LED DISPLAY·····

Tools in need……
LED……outdoor LED Display replacing……
Indoor LED Display or IC replacing……

THE USUAL QUESTIONS & SOLUTIONS OF LED DISPLAY IN USE···

Direction……
Description of questions & solutions……

PRINCIPAL OF TOP TECHNOLOGY'S AFTER-SALE SERVICE·····

PICTURE OF LED DISPLAY & PARTS

CONTROLLERS

●LINSN Sending cards – will be installed in the PC to send data to LED Display

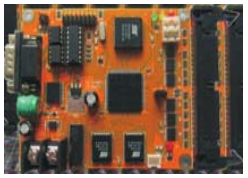
●LINSN receiving cards – will be installed in cabinets to receive the data.

●DBSTAR Sending cards – will be installed in the PC to send data to LED Display

●DBSTAR receiving cards – will be installed in cabinets to receive the data.

●Z-DEC Sending cards – will be installed in the PC to send data to LED Display

●Z-DEC receiving cards – will be installed in cabinets to receive the data



●Liyan Controller – will be installed in cabinet to control the LED Display

●Xixun Controller – will be installed in cabinet to control the LED Display

●Graphic card – control the display way of monitor

●Hub board – insert on the receiving card to distribute the data

CABLES

●RJ45 – internet cable – connect the LED Display and sending card to transfer data

●USB – connection cable – to connect the sending card and PC

●Module data cable – to connect and transfer the data between modules

●Data cable inside cabinets – to connect receiving cards and modules, then to transfer the data from receiving card to every module row;

●DVI Cable – to connect the DVI connector and sending card connector

●VGA cable – to connect the VGA connector and sending card connector

●Power cable – to connect cabinets

●Power cable – to connect the power supply with modules

●Aviation power cable and net cable – to connect cabinets

●Aviation hat – installed on power cable and net cable to connect cabinets

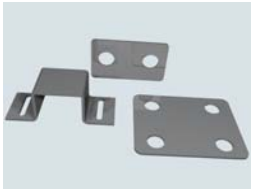
INSTALLATION TOOLS AND ACCESSORIES

● M4 X 10MM screw – fix modules to cabinet

● Allen screw ：①M10 X 60 ②M10 X 25, using with connecting plates to fix cabinets

●Key for cabinet – open and close back doors of cabinet

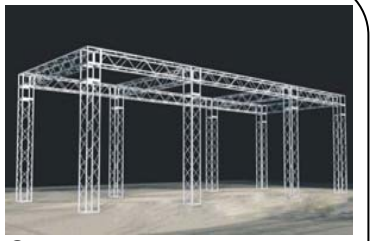
●Screw driver – installation tool



●Connecting plate - ① Z-plate: 120 x 80 x 60 ② flat plate: 120 x 120 ③ flat plate: 120 x 60

●Multimeter – measure current, resistance

● ① Hanging beam ② foundation beam – using together for hanging screen



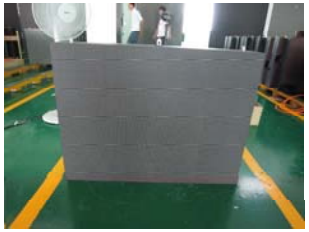
●Truss – support and hang the screen, for rental hanging screen

●Open end spanner – installation tool

●Hex wrench – installation tool

PRODUCT AND PARTS

PERIPHERAL DEVICES



●Face of the cabinet

●Rear of the cabinet

●Face of the module

●Rear of the module

●Industrial personal computer (IPC) – control the led screen

●Video processor – connect to other signal sources, process video

●Power supply – installed inside each cabinet, switch AC 220V to DC 5V

●Electric fan – installed inside each cabinet for ventilation

●Video splitter – video image segmentation

●Power distributor box – to supply electric power for led screen

MANUALS AND CD

●LED control system manual

●LED studio user's manual and CD

●TOP TECH software CD

●Driver disk – to install hardware drivers for the computer

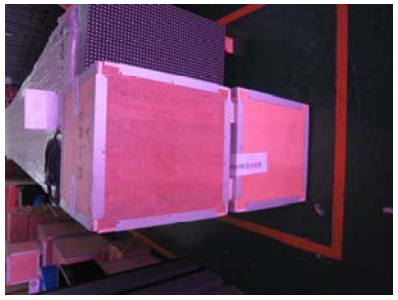
INSPECTION

We, TOP TECH, sincerely suggest every esteemed client does the inspection as three steps when get the screen. ：

Step 1, check the outer packaging

1.Types of packaging

Usually there are two options for packaging: plywood case and flight case



Plywood case

Flight case

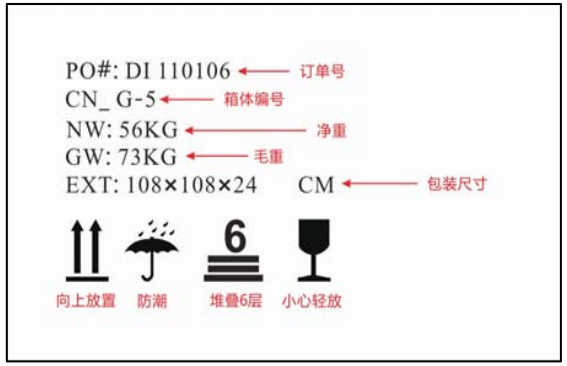
2. Quantities and appearance of cabinets

The quantities of cabinets you get should be the same as the quantities we delivered. Please check whether it is the same or not. The packaging you get should be intact. Please check whether the packaging is stained or opened without permission, and confirm it is exactly the goods you ordered or not.

3. Logo for packaging

Customized logo for flight case, and the mark for plywood case is as follow:

A、Order No.
B、Cabinet serial number
C、Net weight, gross weight, and measurement of packaging
D、Mark which comply with GB191 standards: up, guard against damp, stacks layer, handle with care



Step two： Open the Spare Parts case and check the packing list

1、 Open the Spare Parts Case

Take out the packing list in the case, pls be careful when open it, if it's wooden case, pay attention to aviod ruining the valuable goods inside.

2、 Check the delivery note

Please check the goods, make sure what you received is the same when shipment, including following information:

A:Screen:including the Cabinets, Modules, Switchses, Control Cards, DVI Cards, and other spare parts:
B:Cables:including DVI Cable,signal cable,power cable, all flat cable, connect cable, and its spare parts.
C:Control Software:Including install CD. Control system software and user manual(if by PC shipped, the control system software has been already installed well in the PC)
D: Other spare parts: including spare Led Modules, LED Lamps, keys. Screws, instal steel panels,external devices,etc.
E:Project related file: shipping quality inspection report, system connect disgram etc.
F:Free prepares: Toptech user CD, catalouge, toptech Led screen user manual etc.

As for the order actual condition, each order shipped goods and quantity subject to the order final packing list.

Step Three Casual Inspection

1. Check the cabinet appearance.

Check the mask color, damaged, cabinet back door open freely

2. Light up the casual inspected cabinet

A: Make sure Led Screen relation system, check its function
B:Check the uncontrolled dots, module breakage, or other hardware breakage risk.

After finished above three steps, you can staet instal job freely, thanks.

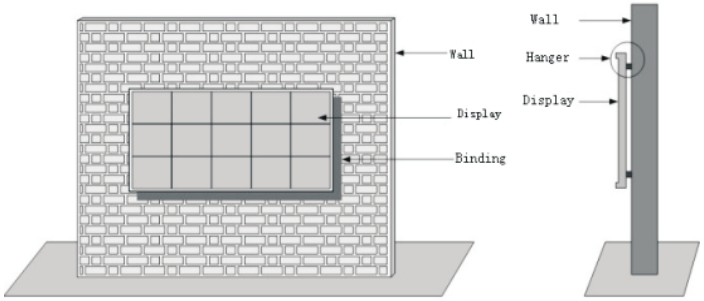
LED DISPLAY INSTALLATION

1.Confirmation of Led Installation Type

Based on different application area of Led Display, dividing a variety of installation types, including fixed installation, rental hanging, sports peremeter installation. Based on different applicaton invironment of Led displays, dividing a variety of installation types as well. Clients can choose installtion types and setting up mouting structure according to pratical situation(our company can make steel structure chat for your reference). As follow focus on introduction of Wall Mounting Type, Mosaic Type, Column Type, Building roof type, Mobile Type,, Rental hunging type and Curve type.

1、 Wall Mounting Type

⑴General used for infoor and semi-outdoor.
⑵If active display area is small, that often will not leave access to maintain, remove whole led display to repair or make frame folded-in-one.
⑶If active area is slightly larger, generally adopt front maintenance design(front maintance design)

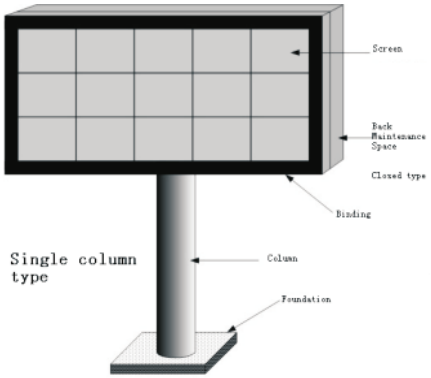


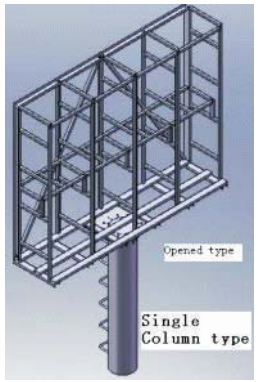
Wall Mounting Type

2、Column installation type

There are many types installation ,generally for outdoor advertising applications ,as follow::

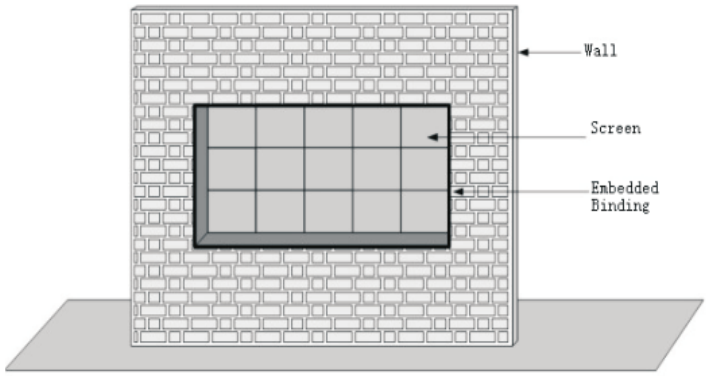
(1)Single columum installation type:applicable for small screen .
(2)Double column installation type:applicable for large screen .
(3)Closed maintainance channel :applicable for simple cabinet.
(4)Opened maintainance channel:applicable for standard cabinet.





3、Mosaic installation

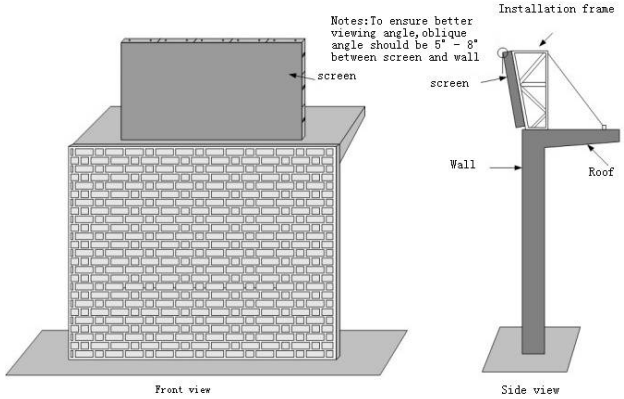
(1)The whole led display is embedded in the wall,display plane and wall at the same level.
(2)To adopt simple type cabinet design
(3)Enerally adpot front maintencance (front maintanance design)
(4)The installation is suitable for indoor and outdoor application ,but generally used for small pixel pitch and area of led screen
(5)Generally used for building ‘gate ,building lobby.etc.



Mosaic installation type

4、 Building roof installation

(1The main point of the installation is wind-resistance .
(2)Generally installed with a tilt angle,or the module design with 8 degree oblique.
(3)Mainly for outdoor advertising application



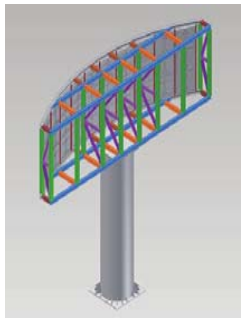
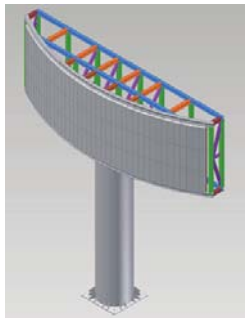
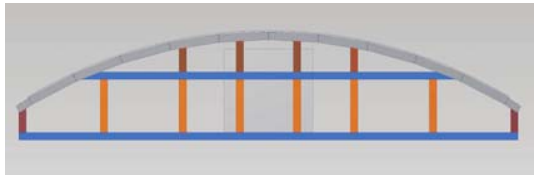
Building Roof Installation

5、 Curve installation

The normall requirment :

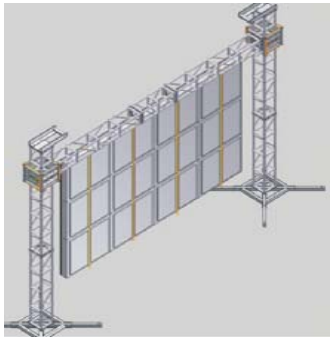
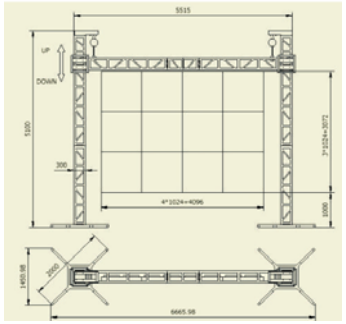
●Screen’s lengthxwideth(birghtness):LXW
●Screen lengthW:the height of the screen
●Screen length L:the length
●The length of the screen could be initially setted by circumference of a circle and arc .divided by the module length to determine the number of modules.
●For the circular screen ,divided by the numbers as much as 92 modules ,determined modules numbers in a row according to the integer multiple of 2,3,4,5,6(Facilitate to the division of cabinet,easy to production).The gradient of module is 2 degrees,generally,one module with 4 degrees only .so generally one completed and perfect round display is composed of 92 modules,and it is not better less than 60 modules.
●After determining the number of modules at a row ,the length of the screen can be devied.
●Screen length L=Module number*module length
●Screen area A=L*W

●For non-circular screen(curve screen),that is simply divided as needs,like the cake cutting.
●The installation mount should be customed by the size of circular (curved)screen.

6、 Hanging installation for rental

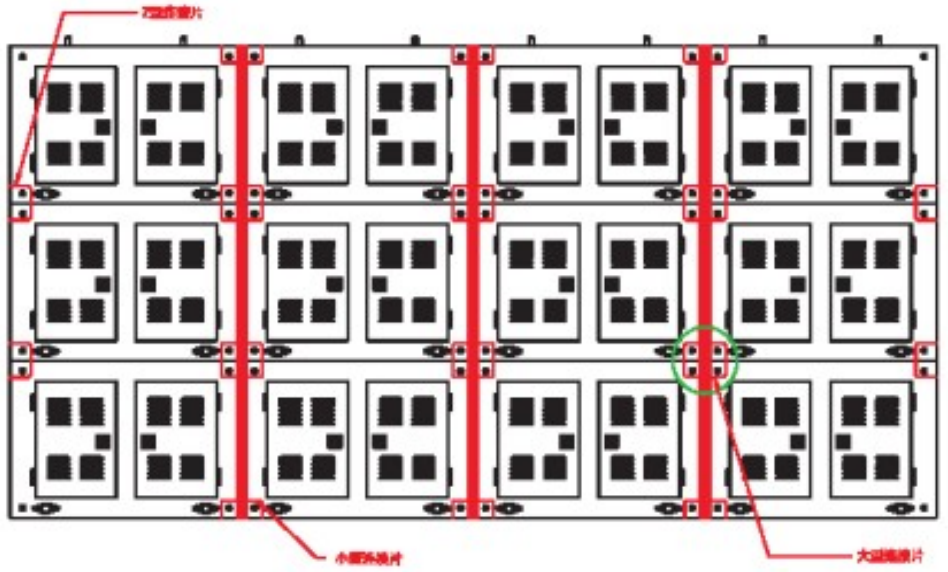
(1)Screen size determined by common screen
(2)Hanging screen is not good on large size ,generally requests less than 6m*10m .except curtain display.
(3)Top equipped hanging beam,bottom equipped bottom beam,hanging beam used for hanging display.
(4)The types of hanging organ divided :gear wheel,cone rod,bolt.
(5)Gear wheel is expensive ,beautiful
(6)Cone rod price moderate ,reliable
(7)Bolt is cheapest ,reliable ,bother for assembly,not suitable for the case of repeated disassembly.

二、 LED DISPLAY INSTALLTATION FLOW

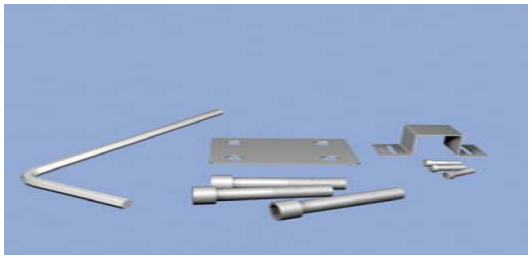
●Outdoor fixed installation

LED display connection sketch map;



1、Prepare the installation tools

① M10x60mm screew
② M10x20mm screew
③ M10 Hexagon wrench
④ 110x55mm connecting iron piece
⑤ 110x110mm connecting iron piece
⑥ Strip iron piece.

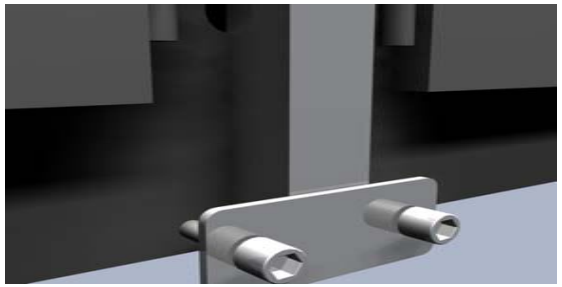


2、Cabinets connection and fixation

When beginning to install the cabinets please make sure that the substratum (steel structure) is fat enough.The falt substratum can reduce the crevice (gap) between two cabinets. Otherwise, the more load up, the greater the gap. After placing the firt series of cabinets on the steel structure, fasten the cabinets by connecting the metal plate to the 40# tube (channel steel). However, do not fasten the screw too tight, and then proceed the final adjustment to finish the assembly.

Side view

Middle view



Bottom connection view

The full view after installation

3、Power supply cable and signal cable

3.1Cables

Short signal cable-CAT5, connecting the receiving cards among cabinets

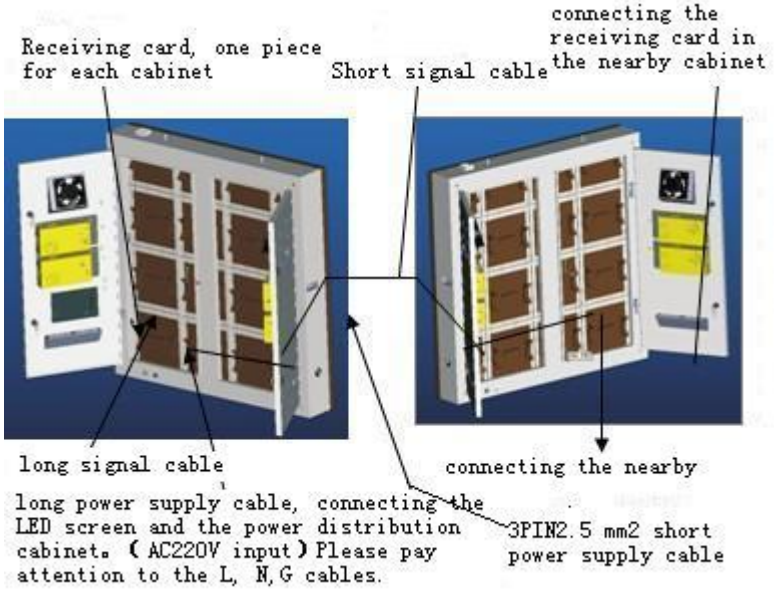
Long signal cable-CAT5, connecting PC and the LED scrern

3PIN2.5 mm2 short power supply cable, connecting the terminal and the cabinet

3PIN2.5 mm2 long power supply cable, connecting the LED screen and the power distribution cabinet

Note: L-brown wire, N-blue wire,G-yellowish green wire

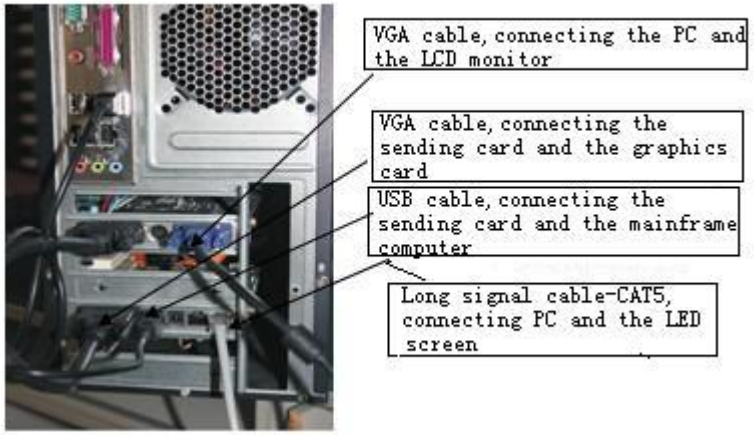
3.2 Schematic diagram of connection


Receiving card, one piece for each cabinet
Short signal cable
connecting the receiving card in the nearby cabinet
long signal cable
connecting the nearby
long power supply cable, connecting the LED screen and the power distribution cabinet。（AC220V input）Please pay attention to the L, N, G cables.
3PIN2.5 mm2 short power supply cable

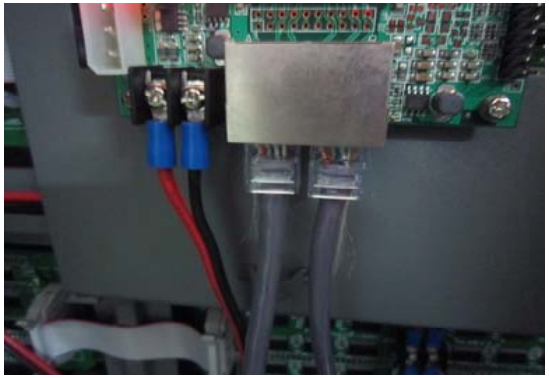
4、The installation and connection of the sending card

4.1The schematic diagram of the DVI card and sending card in the mainframe computer

4.2Wiring diagram of the mainframe compute


VGA cable, connecting the PC and the LCD monitor
VGA cable, connecting the sending card and the graphics card
USB cable, connecting the sending card and the mainframe computer
Long signal cable-CAT5, connecting PC and the LED screen

5 Wirng diagram of the controller



6The full view after installation

●Illustration of rental Led display /of rental cabinet installation

1、Tools for installation:power supply cable,network cable,hexagonal rod

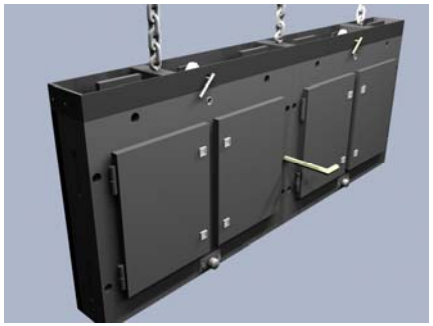
2、Fixation of the hanging beam and cabinet

3、Embeding the hanging beam into the cabinets,from the top.and the fast enit

4、Fix the cabinet to the hanging beam by fastening the lock catch

5、Fix the Middle Lock of Screen to bind the Cabinet and Hanging Beam tightly.

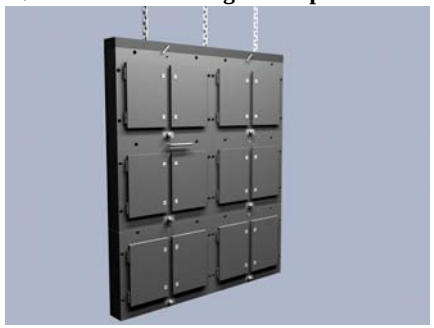
6、Connect the neighbouring Cabinets in horizontal direction with locks.



7、Pull up the Beam has been already installed and the first layer, then begin to install the second layer.

8、Lock the relevant position up after installing the second layer.

9、The effect drawing of complete installation.



10、Connect the Power leads and Data leads according to the connector of the Screen Body.

11、The full view of Screen Body after installation.

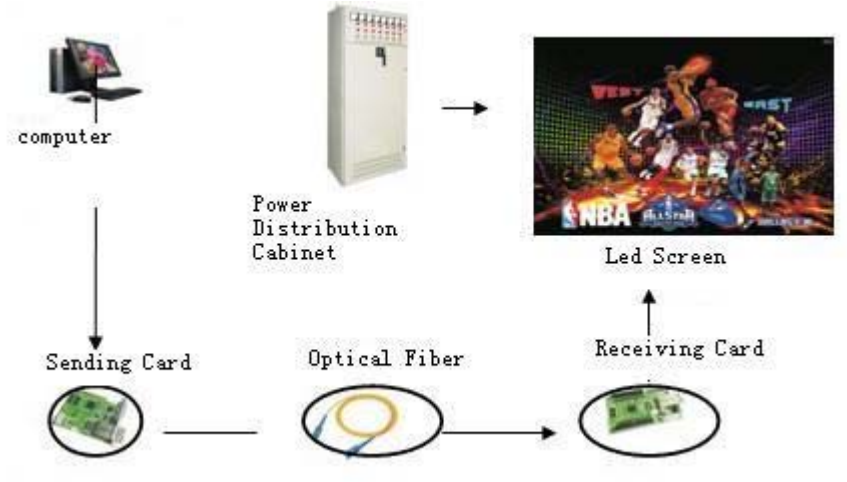
After installing the Screen well, we begin to debug the control system.

DEBUGGING OF THE CONTROL SYSTEM

●Toptech's control system mainly includes Linsn, Z-Dec, DB Star, Xixun, Lytec, pls refer to the relevant System Manual according to the praticle situation of the order.

THE SIMPLE MANUAL OF LINSN CONTROL SYSTEM

一、Link Graph of PC, Control Sytem, and Screen



二、Computer's selection and installation

2.1Computer's running invironment.

Operating System
Chinese and Engligh Windows 7 /XP

Hardware Configuration
CPU: The pentium 4 2.4 GHz or above RAM:1G or above Graphic Card PCI-E socket: Standard VGA512M display mode or above

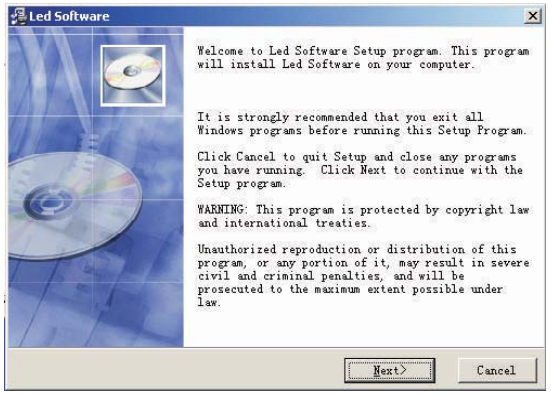
Relevant Software
Microsoft's Media Player-must be installed Finaldecoder 2009 or above(fiercely recommend)
OFFICE2011- must be installed if need word
Realplayer- must be installed if need display realplayer

2.2Step for installation

《LED Studio》software can be easily installed with the following steps:after inserting the LED studio installation CD into computer cd-rom, you will see the installation interface(if not, select the CD,and click it twice with mouth)

Picture 2-1

As shown in picture 2-1, select" install Led Studio", begin to install its installation guide

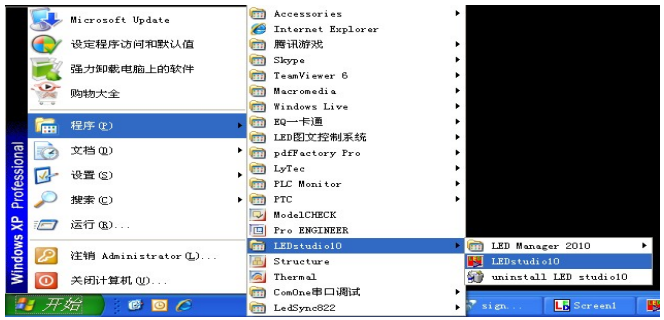

Led Software
Welcome to Led Software Setup program. This program will install Led Software on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup Program.
Click Cancel to quit Setup and close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next>
Cancel

Picture 2-2

As shown in picture 2-2, operate as the indication. Note: This is the Serial-Number-Protection software, installation can't be continued without inputing the correct serial number, the serial number is "888888"

.

After finishing installing the software successfully, the "Led Software" Program Group will appear in the Start/Program Menu, and click the "Led Studio" within this program group to run.



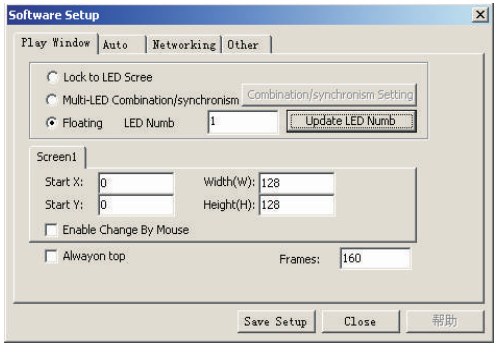
Picture 2-3

As shown in picture 2-3, at the same time, the shortcut of "Led Studio" appears on the desktop.

三、Special note and the setting of computer parameter.

3.1Open the Setting of software

Click "Set" in the main menu, select and click the "software setting" in the down menu, the dialog box of inputing the adminstration code, click ok after inputing the code.



Picture 3-1

3.2 Play Window

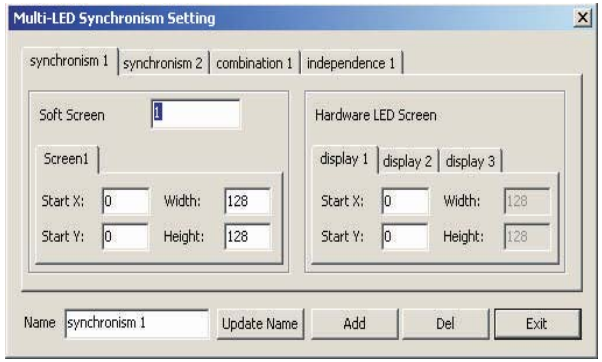
There are 3 modes of Play Window: Choose lock to Led Screen, Many screens' combination/synchronization, Freewill Set

Locked to the LED screen

Locked the display window to the led screen area

Multi-screen assembly/synchronous

Choose screen-assembly/synchronous, and click the button of" assemble/synchronous setup" to open the dialog-box of the multi-screen assemble//synchronous setup as shown in pic. 3-2



Picture 3-2

Setting up at your will

Users can set up the number of the screen and adjust the size of the screen at their need, and click the "refresh the screen number" to change the screen number when the change is needed.

The mouse is allowed to adjust the size and location

The mouse is also can be used to change the location and size of the display window

The display window is always headmost

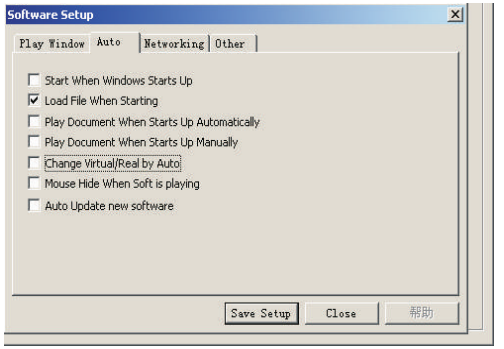
The display window will appear in front of any window, it will not be blocked out

The software is responsible for displaying the frame frequency

According to the different computer configuration, you can promote the display quality

3.3 Set up automatically

The software has the functions as follows: it can be activated when the Window is started; loading the documents automatically when activated; when starting automatically, it can display automatically; when start manually, it can display automatically; switch the real image and virtual image automatically; the mouse can hide/show automatically; automatic update the new software, as the pic. 3-3 shows.



Picture 3-3

3.4Other setting ups

The software can restart automatically when it is fault: when there is something wrong with the software, it will restart automatically.

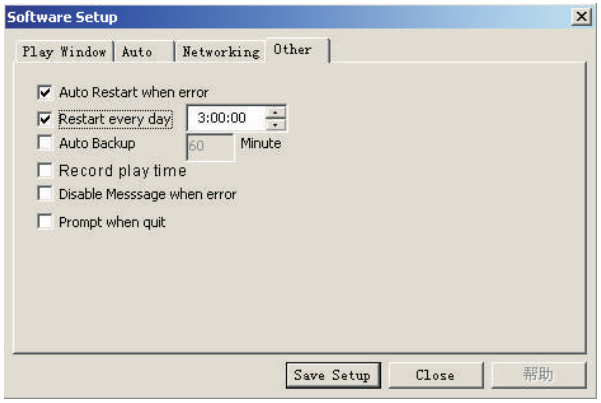
Restart the software everyday: restarting the software in fixed setting time

Back-up at regular time: it will back-up the displays at regular time

Record display time: it can record the display time and store in the document of play.txt.

Error pointing-out is unallowed: the window of error pointing-out will not appear during display.

Exit verification: when clicking the exit button, it will appear a dialog window for you to confirm.



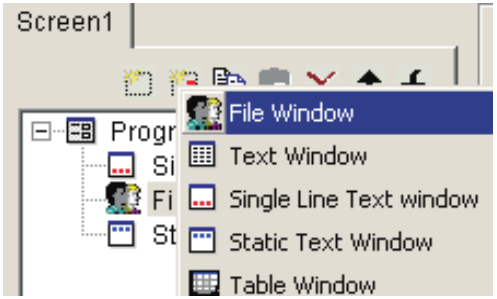
Picture 3-4

四、Simple software operating steps

4.1Display videos

4.1.1 Open a new display window

Click the button of “open a new display window” and choose a “text and graphic window” to start a new item of text and graphic window



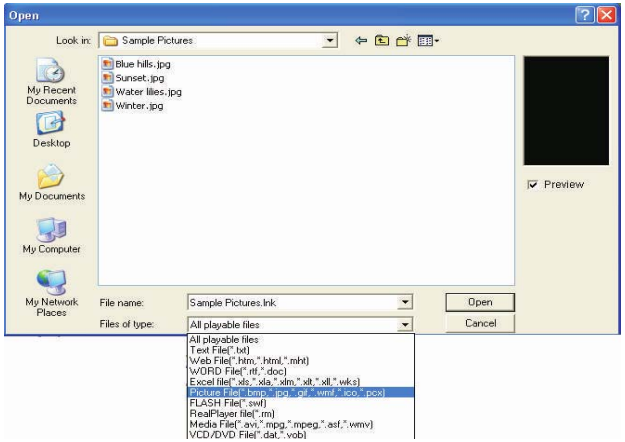
picture 4-1

4.1.2 Setting animation display window

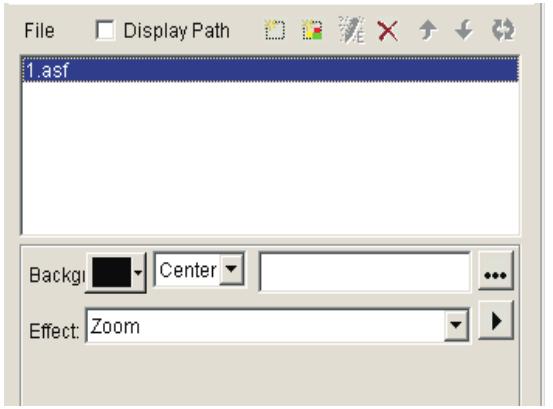
Setting the attribute of the program
Name : the name of the showing display
Frame: setting the width and the color of the frame is allowed.
Starting point X: the relative position X on the big screen.
Starting point Y: the relative position Y on the big screen.
Width: setting the width of the display.
Height: setting the height of the display.
Lock: lock the window to make it not move.

4.1.3 Open the display document

Click the “add document: button on the center-under point to open the dialog window.
To broadcast the animation file, all the media file (AVI/MPEG/ASF/WMV), and FLASH animation file (SREAL PLAY) (RM) and so on is allowed in this display.
Open the file in any type above, show as pc.4-2



Picture 4-2.



Picture 4-3

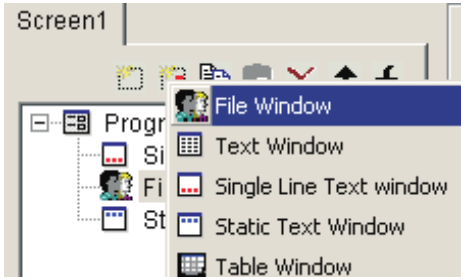
4.1.4 Set up the file attributes of the animation file

The file opened just now has been added to the listing, to choose the background color, background picture and drawing methods of the background pictures. Three effect can be chose.

4.2 To display the picture

4.2.1 Open a new picture and program window

Click the button of “open a new picture and program window”, to choose the button of “image-text window” to establish a new image-text window, show as the pc 5-1.

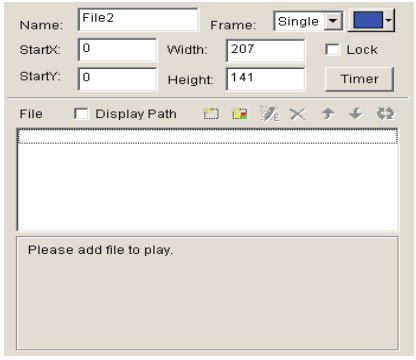


Picture 4-4

4.2.2 Set up the image-text window

To set up the program attributes

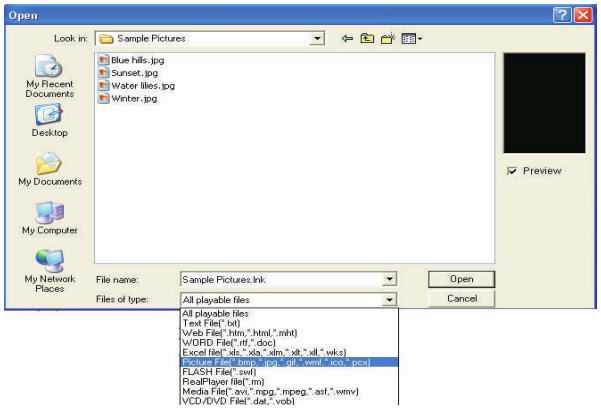
Name: the title of this program
Frame: setting the width and the color of the frame is allowed.
Starting point X: the relative position X on the big screen.
Starting point Y: the relative position Y on the big screen.
Width: setting the width of the display.
Height: setting the height of the display.
Lock: lock the window to make it not move.



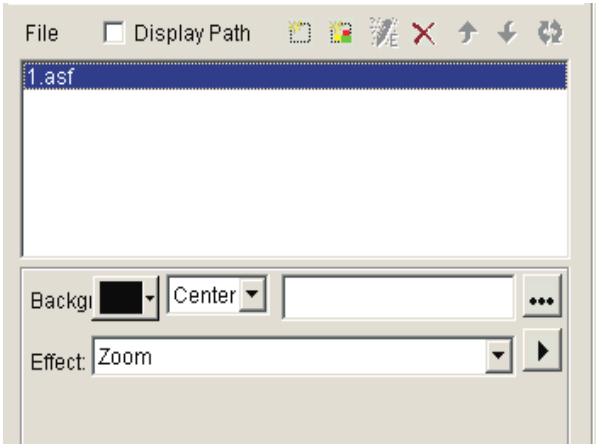
Picture 4-5

4.2.3 Open the displaying file

Click the button of “add the document” to open a file dialog window, and to choose the type of image-text in the listings and open it (when you choose the picture, you can preview the pictures on the right). Click the picture to open it. And the right lower part of the window will be as the below shows.



Picture 4-6



Picture 4-7

4.2.4 Set up Play Picture Properties

The file of Open has been added to the list Just now, then, The following lists the file option,you can select background color,background photo,backgrond Image Rendering，
A dozen special effects Available to choose，Speed，stay time,clearing effects,clearing speed.

4.2.5 Insert background photo, Playing music and text.

Insert background photo

Click the Button，in the Open File dialog box. select you want to insert a background photo, Click Open. You can also enter directly in the edit box background image.

Insert playing music

Click the button, in the Open File dialog box, select the music,then click Open.

4.3Play text .

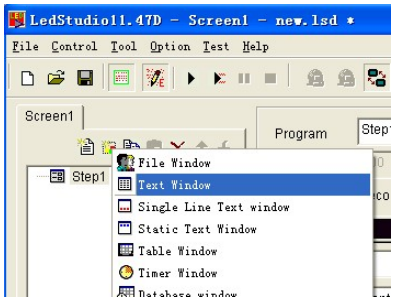
There are six methods programs: a text window to play, play in the static text window, open the file in a text file playback window, the window in the document text superimposed on a picture file playback and inserted in the broadcast notification Play

4.3.1 Play in the text window

The window is not required, the text can be broadcast in the graphic window, this window is only a simple Wending such as company name, welcome text, notices, etc. provide a fast input method.

New text program window

Click on "New window" button, in the menu, select "Text Window" to create a new text window.



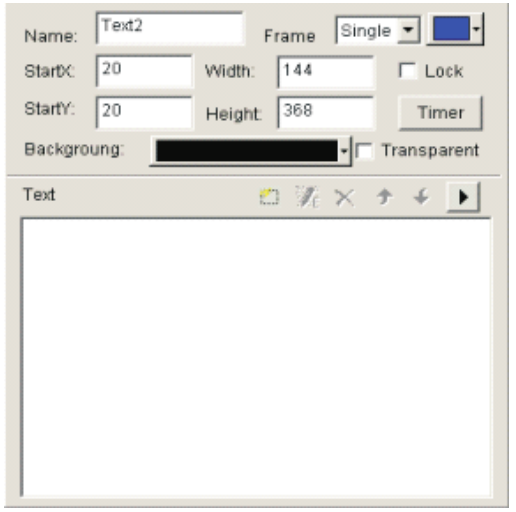
Picture 4-8

Set up text program window

Set up text program Property

Name: the name of the program

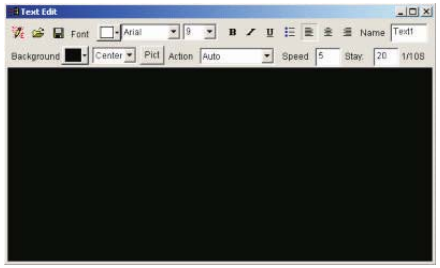
Frame: you can set up the width and color.
Starting X: Relative to the starting position Y for big display
Starting Y: relative to the starting position X for big display
Width: Set up the width of the program
Hight: Set up the hight of the program



Picture 4-9

Insert and edit text

Edit Text。Click the picture "add text" the button will appear "Text Edit" dialog box,In the end of bottom edit box ,you can enter text directly write text,and you can copy into text. Also,you can do type-editing, can set up the background, fonts, special effects, speed, stay time and so on



Picture 4-10

After editing ,the text Close "Text Edit" dialog box, then ,the test will appear list it .

Picture 4-11

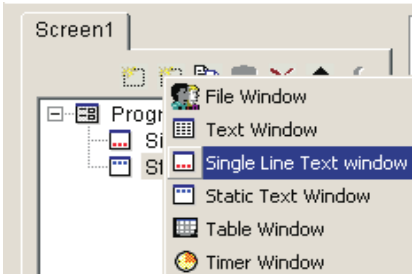
If you want to modify the text, just select it and click the button, open the edit box will allow you to modify . delete the texts,you can select remove the program button, remove text in order to use the Move button. Click the button can be used to preview the selected text.

4.3.2Play in single-line text window

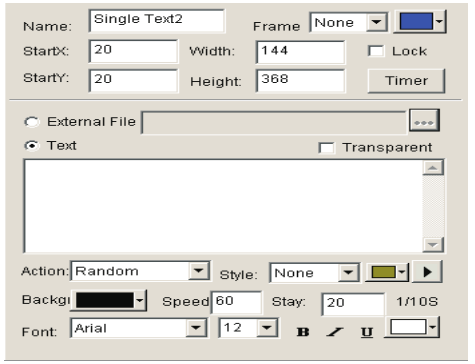
The window only can be welcome captions words, notices, etc. to provide one-way move titles, these test to support a transparent display, which can be windows, including text windows and photo of the video file

Create new single-line text window

Click the "create new window" button, in the menu, select "single-line text window" to create a new single document window.



Picture 4-12



Picture 4-13

Set up single-line text window

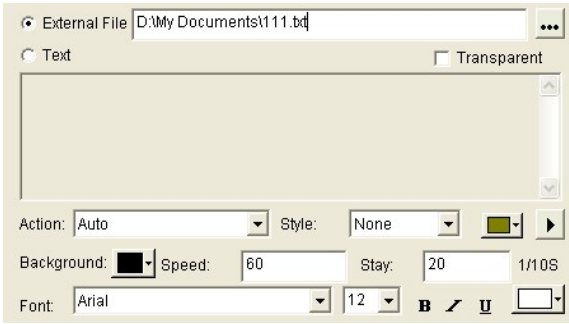
Settings up show property. there are two way input text, one is open from an Externa file, the other is directly in the edit box.

Open from externa file

Select "External file" , click the button to open the file, the program can modify the dynamic display during playback of a text file. You can set up action, backgrounds, fonts.

Input Edit select "text"

Select the “text”, and then type in text that you want in the box below ,you can also set up the action ,,background and fonts

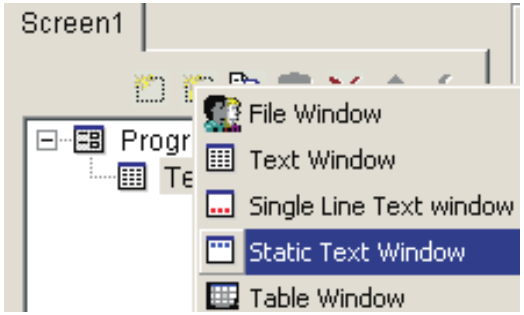


Picture 4-14

4.3.3 Play in the static text wondow

Creat a static text wondow

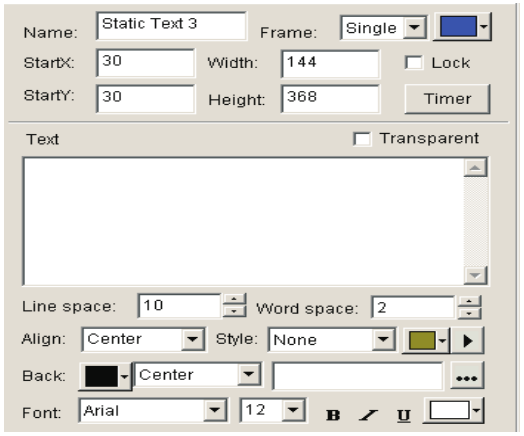
Click on the “new window” button and then select “static text window” in the window to creat a new static text window.



Picture 4-15

Setup the satic text window

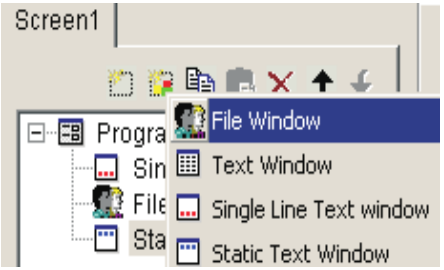
Type in the texts you want in the edit box, and choose properties below, like transparency, Align,Background, and Font, etc.



Picture 4-16

4.3.4Play text files in a file window

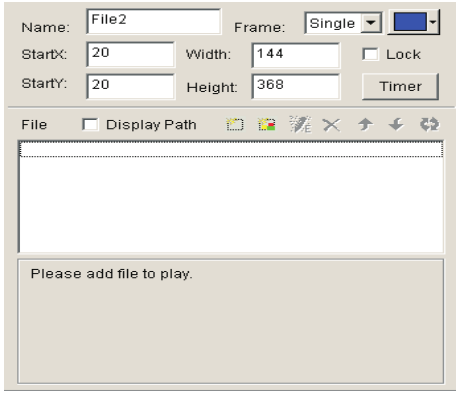
Click on the “new window” button select “file window” in the menu to create a new “file window”



Picture 4-17

Setup file window

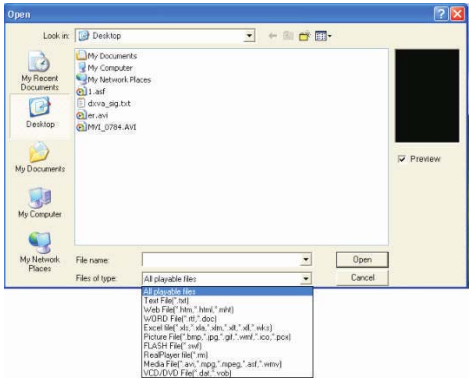
Name: program name
Frame: you can setup the width and color of the frame
Starting point x: x-coordinate of the starting point
Starting point y: y-coordinate of the starting point
Width: setup the width of this program
Height: setup the height oh this program



picture 4-18

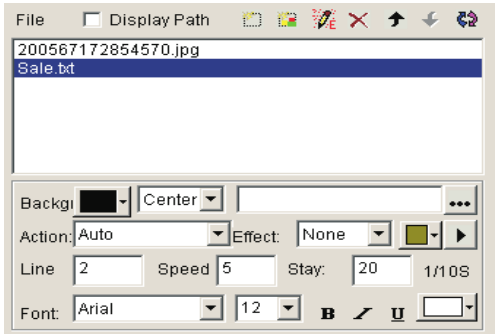
Open play files window

Click the "add file" button ,an open file dialogue box will appear.All supported formats are listed in the list at the bottom of the dialogue box.Selecting text file or Word file from the above file list,then click the open button to open it.



Picture 4-19

The opened file has been added in the list,now the option of this file is listed below,you can choose background color,background picture,drawing methods,dozens of specials,four kinds of effect,speed,staying time,and options of characters.(Remark:if there are only few words,file window can be used.If editing is complicated,word file can be chosen)



Picture 4-20

五、 Frequently asked questions

A、Warning of MCI system error when starting?

This is because the Windows Media Player has not been installed,please install it.Find a file named Mpsteup2k.exe(for WIN2K/ XP/me),or Mpsteup98.exe(for Win98).Double clink to install.

B.Warning:can not find the screen system or transmission error.

That is because of the disconnection between the screen and the serial port cable,or they are not connected well,please check it.

C.How to change the position and size of the play window?

In order to change the position and size of the play window,firstly,enter into the software setup,set the position of the play window to "any position",then input the coordinate and size of the screen,or use mouse to drag the play window to change the position and size of the screen.For more details,please refer to "software setup"

D.How to run automatically and play the specified file?

Firstly,enter into "setup"---"software setup"---"automatic setup",then select the three options.

E. How to edit the existing files(.lsd)?

Click on “open” button to open the file, and then select “allow edit” to allow you make chanages to the files. For details, please refer to “programming”.

六、 Special function

Program(program document) consists of one or more than one program pages. There are two kinds of program page: normal program page and overall program page. Normal program pages are the main components of a program, so there may be many. They will be played in order, one after another; there should be only one overall program page, played throughout the playing process. It’s mainly used for fixed content’ broadcast, such as clock, company logo,etc.

Program page consists of one or more windows, which is used to show the contents that users want to play, like document, pictures, cartoons, multimedia segments etc.there are twelve kinds of program windows; file window, text window, single line text window, static text window, table window, timer window, data base window,DVD/VCD window, external software window, data/time window,video line-in window, and geometrical graph window.

File window: can play various files like words, pictures, cartoons, tables,etc.
Text window: used for quick inputs of short writings, such as notifies, etc.
Single line text window: to play single text window, such as notices, adverts etc. writings.
Static text window: to play static texts, like company names, titles, etc.
Table window: to edit and play table figures.
Timer window: for timing, supporting clockwise and anti-clockwise.
Database window: to play ACCESS database and ODBC driver database.
DVD/VCD window: to play DVD/VCD
External program window: to insert external program into the play window, mainly used for small programs made by users.
Date/time window: to play date and time.
Video line-in window: to play signals from TV cards, video collecting cards, etc.
Geometric graph window: to display geometric graphs like straight lines, circles.

ZDEC SERVICE MANUAL

1.The chart of PC, system & LED screen connection

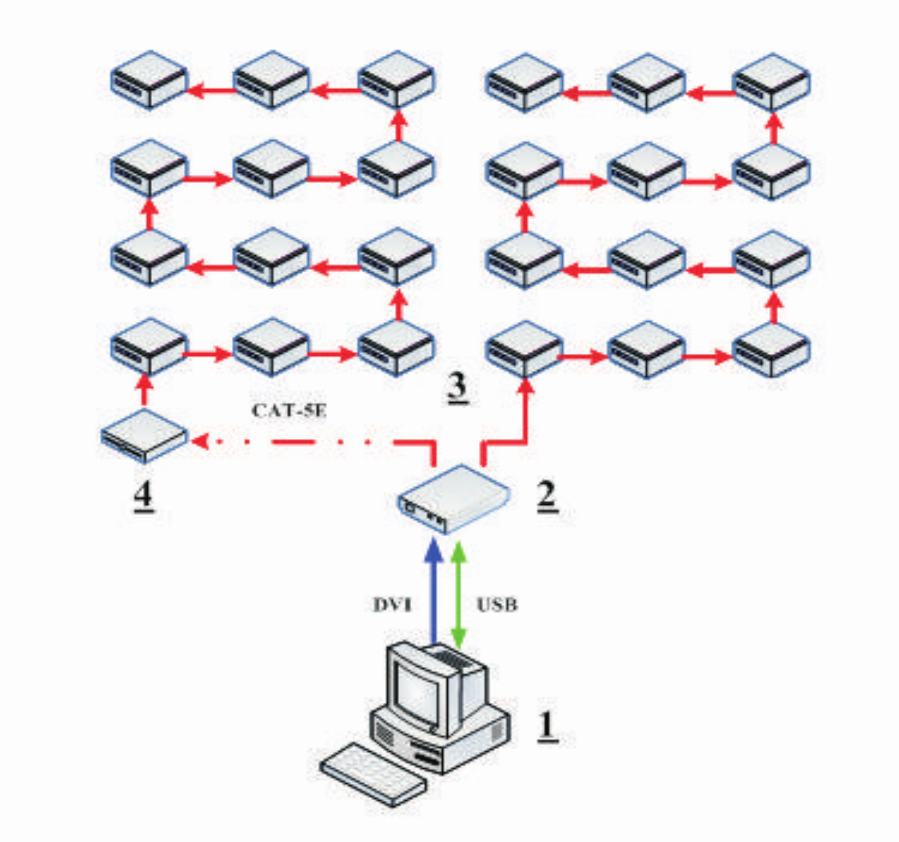


Figure 1-1 single sending card application

Solution introduction: in fig1-1, indicate compter, 2 indicate sending card, 3 indicate receing card, 4 indicate monitor. Sending card has 2 output port, U port & D port. Receiving card are connected in series-wound condition, detector can be fixed behind U port or D port(Non-permit fix the detector in both port, don't fix detector is also acceptable). Detector is used for real-time monitoring brightness,temperature and humidity of LED screen. The maximum equipments for each sending port is 200.

二、Computer & Install

Operating environment

●Operating system

Windows2000/XP Chinese and English version

●Hardware

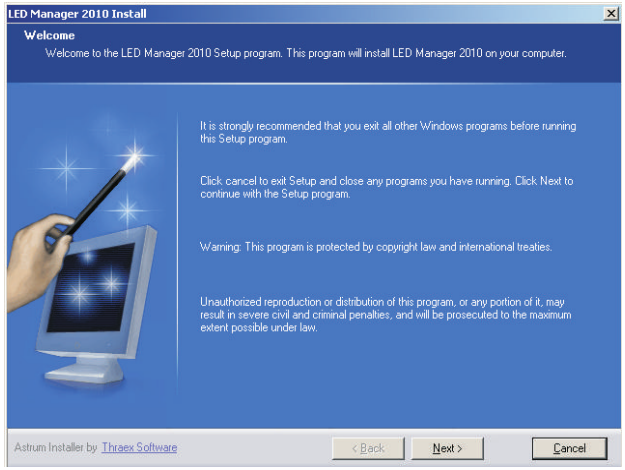
CPU: celeron 2.4G or higher
Memory: 1G or higher
Graphics: 32M or higher

●Related software

Video decoder—compulsory (install special decoder when play RM or RMVB format file)

2.1 Install

《LED manager 2010》software is easy to be installed. firstly, to check whether the computer has old version of LED manager tool, please un-install it of exist. Secondly, double click LED manager file and then diadlogue popup, see fig 2-1, select "next" to start installing. When the installation of 《LED manager 2010》is made, the "LED software" will appear in the <start/program>, click to start operation after entering <LED manager 2010> in the program as fig 2-2 shows.


LED Manager 2010 Install
Welcome
Welcome to the LED Manager 2010 Setup program. This program will install LED Manager 2010 on your computer.
It is strongly recommended that you exit all other Windows programs before running this Setup program.
Click cancel to exit Setup and close any programs you have running. Click Next to continue with the Setup program.
Warning: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Astrum Installer by Thraex Software
< Back
Next >
Cancel

Picture 2-1

Picture 2-2

At the same time, also on the desktop "LED management tool 2010" Shortcut: double-click it as shown can also start the program.

2.2 Uninstall

《LED administrative tool》supply automatic install operation,

"LED management tool 2010" provides automatic uninstall, so you can easily delete "LED management tool 2010" all the files, program groups and shortcuts, users can select from group "LED software" "Uninstall LED management tool 2010 ", as shown in Figure 2-2, can also be passed in the Control Panel Add / Remove Programs quickly unloaded. Click Uninstall, it will pop up a dialog box asking whether to confirm the uninstall, click OK, the software will automatically uninstall; the uninstallation is done in Figure 2-3.

Picture 2-3

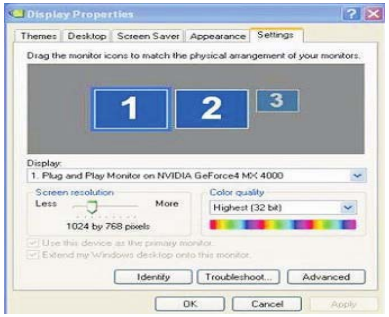
三、 Special Notes, and computer parameter settings

This section with NVIDIA graphics as an example of the computer graphics set method. Video card brand, different model, the setting method slightly different, note that this day only for reference, please according to actual situation video card set mode.

In order to ensure the content on computer monitors and LED screens display the same content, we want more than one graphics card output (typically VGA and DVI output) set to copy mode. Generally monitor set to Slave Device, the display system set the master device. Set as follows:

3.1 After computer operating system starts, right-click the desktop, then use the context menu button to select the "Properties" item to enter the 【Display Properties】Settings dialog box.

3.2【 Display Properties】 in the pop-up , select【 Settings】 the most right page, then click on the menu at the bottom right corner of the "Advanced" button, as shown in Figure 3-1.

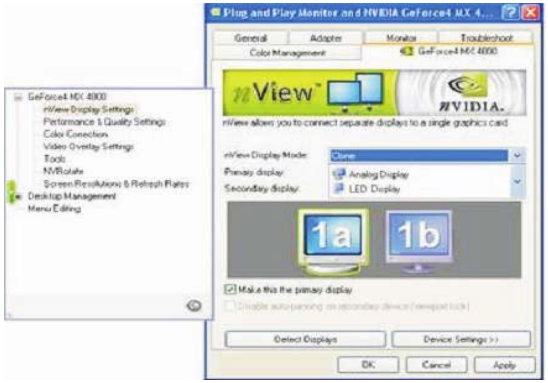


Picture 3-1

3.3 In the pop-up 【[Plug and Play Monitor and NVIDIA GeForce6200】dialog box, select the menu of【 GeForce6200 】menu, and on the left side of the additional menu, click "nView display Settings menu, as shown in figure 3-2.

Picture 3-2

3.4 In the pop-up screen has two options, including click "nView" options menu, select the copy, and then save Settings, to return to main interface, as shown in figure 3-3

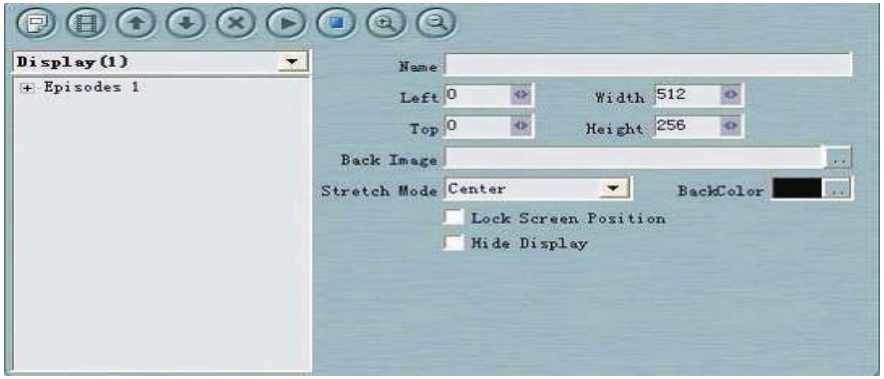


Picture 3-3

Through the above, DVI has opened the signal output. Observe and identify the sending CARDS state lamp instructions correct.

四、The simple software steps

Step One: Set the playback window size



Picture 4-1

Playback window size must be set correctly, otherwise programming may only playback a part or not big enough, the method of setting: Menu → Settings → Display settings, as shown in Figure 4-1, you can select in the software to set lock display window position (the best choice for this option, playback window and display exactly have the same size and position).
Left margin and up margin (X, Y) were set to (0, 0) to ensure that play window at the upper left of the screen, width, height according to you the size of the screen to set, such as your screen width and height is 512 X 256 point is set to (512256).

Step Two: New Episodes

Episode is the program's basic elements. Figure 4-2 shows the program toolbar, click the New button in the pop-up menu you can click the episode. File can contain any number of episodes, delete button is used to delete program and move button is used to move the program. Zoom in and out buttons to change the current ratio of the display screen for easy editing.

Picrure 4-2

Step Three: Set episode options

When new episodes of items or selected episodes of items, you can to set the display window on the right episode option, as shown in Figure 4-3, episodes of options are available episodes name, episode option, play time / the number and background music.

Picrure 4-3

Step four: New Multimedia window

Episode is only a framework, it can contain any multimedia window. Click the New button to select the multimedia window, as shown in Figure 4-4.

Picture 4-4

Step Five: to set multimedia window properties

Each multimedia window can set the location, size, background, transparency and other properties, as shown in Figure 4-5.

Picture 4-5

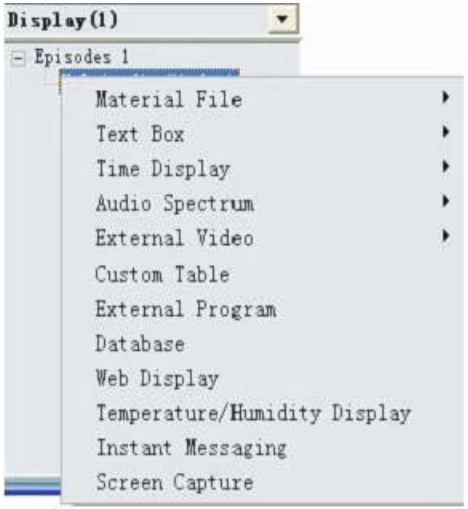
Specific instructions for each property are as follows:

Name: the name of the multimedia window, the name directory displayed in the editing area on the left column, as shown in Figure 4-5 on the left menu bar. Left margin, up margin: the distance between the left frame of the media player window and its left frame of playback window, and the distance between up frame of media player window to its up frame of playback window.

Width, height: media window height, width.
Transparency: the transparency of the media forms background.
Background transparence: on / off transparency
Maximize: media player window full of playback window.
Background image: The media window background image.
Background Zoom: The background image display window media format.
Background color: background color of the media window.
Frame Style: windows media frame style.
Frame Color: media window frame color.
Playback Options: used to guide the play times of media window or play time.
Views / Time: Enter the number of the media play times or play time.
Clip playback time of this set as a benchmark: the end of episode is based on the time of play window, such as: there are ten episodes under play window, if the third player in the window check this, then when the third finished, the program fragment under all players will stop playback window.
Lock position: Locks the position of the media window.

Step Six: Adding multimedia material

Each multimedia window that can be played simultaneously in different text, pictures, tables, animation, video and so on. Twelve of multimedia material to choose from, as shown in Figure 4-6.



Picturte 4-6

Material file: The most important material. Including picture, video, flash,word and excel and other formats of media files.
Test box: used to play text files, such as: Notice,advertisement text, you can add single-line text, multi-line text and the word special flash effects(Default rate of 12 frames/sec)
Time display: Used to display time, include the clock display, timer time.
Audio spectrum: Including audio visual images and audio spectrum image
External video: Used external camera or SDK3000 video card to connect other video equipment such as TV,VCD/DVD,VCR.
Custom Table: used to edit and display the tabular data
External program: For embedding the external program into the display window,mainly for playing small programs user developed for themselves.
Data base: Use to display the database file. Include access database and ODBC database.
Web display: Used to display web pages.
Temperature /Humidity display: Use to display the current environmental temperature and humidity.
Instant Messaging: Used to quick a short text. Such as notification letter.
Screen capture: Used to record the current screen image inside the window.

Step 7, Set property of multimedia material

For each of the properties of multimedia material, we will point out in the later chapter. You need to create multimedia from type upon needs, find the corresponding chapter,which can obtain more detailed property information.

Step 8, Finish program production

After eight steps above, a complete program can be completed .If need more episodes just repeat step 2 to step 7. When finished click the drop –down menu -> <file> → <Save project> or <save project as> to facilitate the next use.

Step 9,play program

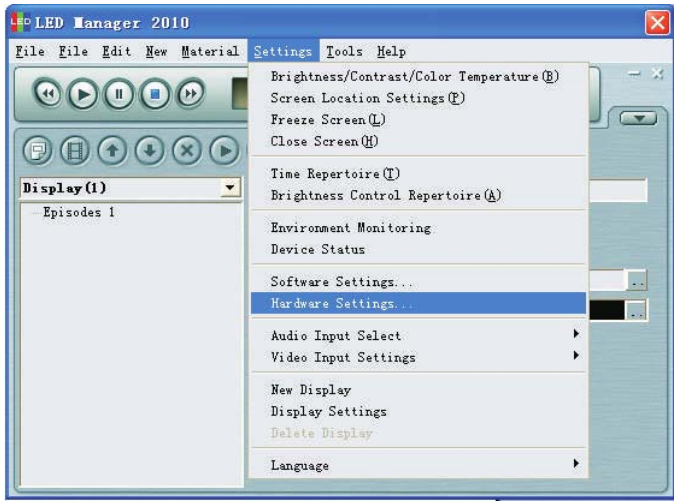
Click the bottom <Play> in the control to start playing shows,<Pause> bottom and <stop> for stop playing

五、 Trouble shooting

5.1 The whole screen Blindness

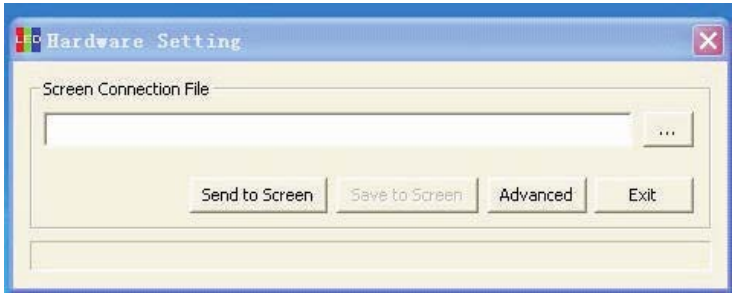
Solution:
1.Check the power supplyof the whole screen.
2.Check whether the indicating lights of the sending card and receiving card is in the normal working condition or not. The normal working condition of the sending card is the green light twinkling,red one keep blind .as to the receiving card one green light twinking,the other keep lighting.
3. Click into the setting configuration of the software.To check whether the close option of the screen has been chosen.
4.If all the above is correct. Then resend the screen connecting file. The operation as follows:

Open the “LED MANAGER 2010” Click the hardware setting under “setting”,it includes all the main setting of the screen(see figure 5-1)



Picture 5-1

While entered into the” hardware setting” option, and at least one sending card and the PC USB port correctly connected. Then input the words: “z” “d” “e” “c” it will comes out an password window.(See figure 5-2)

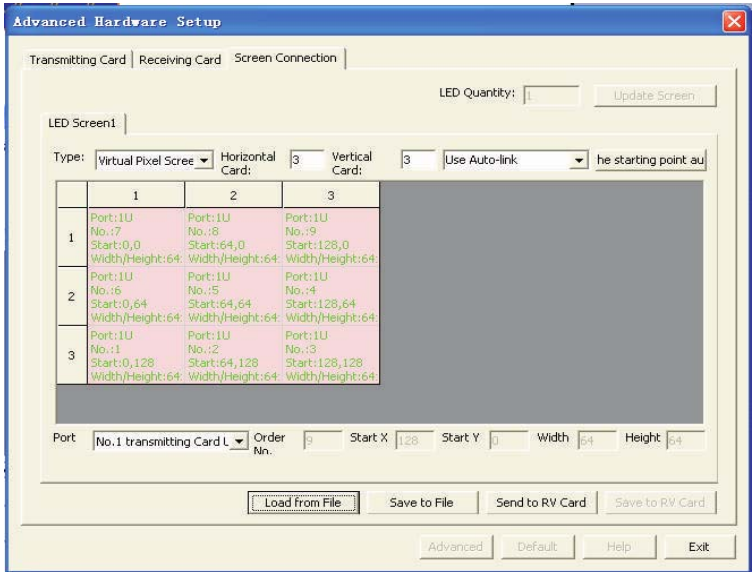


Picture 5-2

Input the password”168” and click the “ confirmation”bottom to enter into the “advanced hardware setting” windows. (See figure 5-3) (Notice: <advanced hardware setting> is for professionals only, the common user is not recommended.)

Picture 5-3

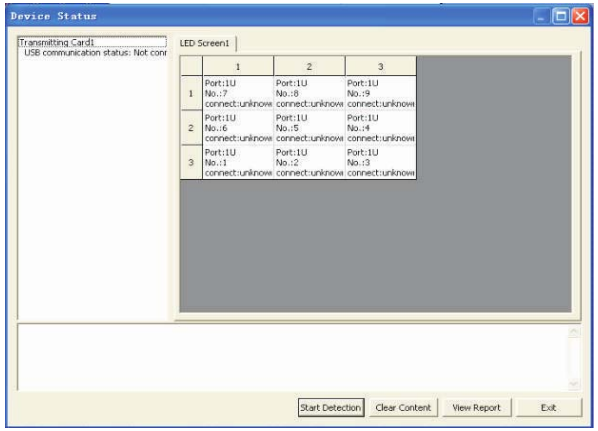
Click the"Screen connection" bottom to enter into the screen settings (See figure 5-4) ,the screen connection mainly sets the connecting conditions to the screen. If stored such files before. Then you could click the button" load from file" to load it from the exist file.



Picture 5-4

5.2 Part of the screen displays unmoral

Solution: Click the "Device status" under the setting option, see under figure(5-5)



Picture 5-5

Checking the transmitting card status if have unusual status. THen click the "Start detection" button (Figure 5-5) to check whether there is default data appears.

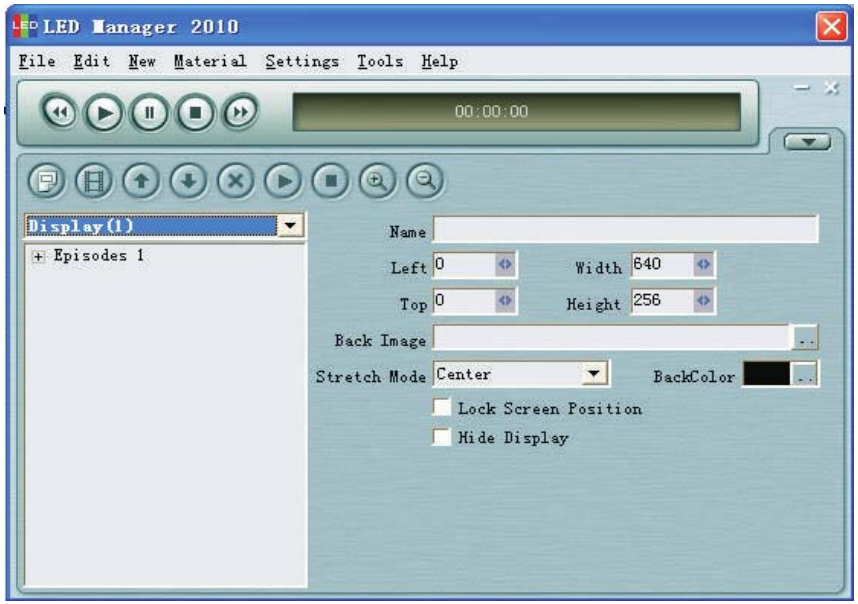
Picture 5-6

Observe if the data appears wrong. If discover the data appears wrong. Then please check the connection between the current receiving card and the closed ones.

六、Instruction of special functions

6.1.Start out the LED manager Tool 2010

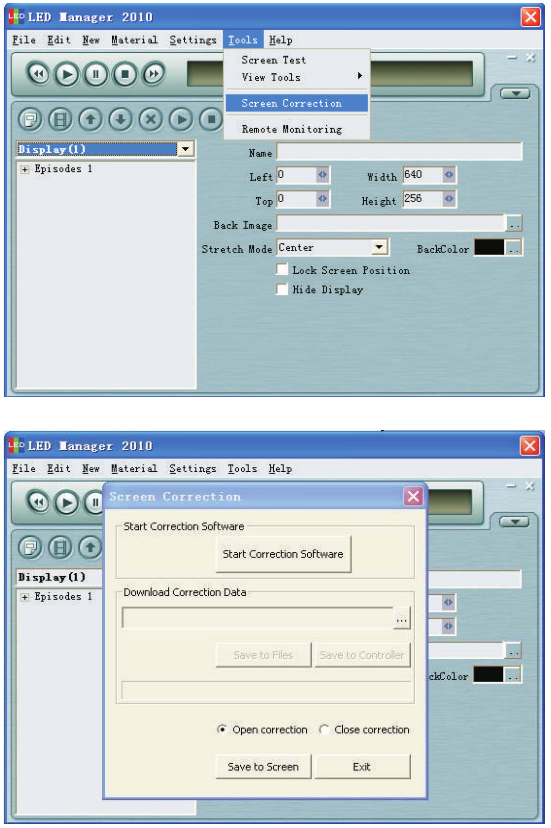
Start out the LED manager Tool 2010, as in picture 6-1 below:



Picture 6-1

6.1.2 Open the software for spot to spot correction

●After the set up of the LED display, click the"display calibration" under the "tool" menu list, then comes the "display calibration interface" as in picture 6-2



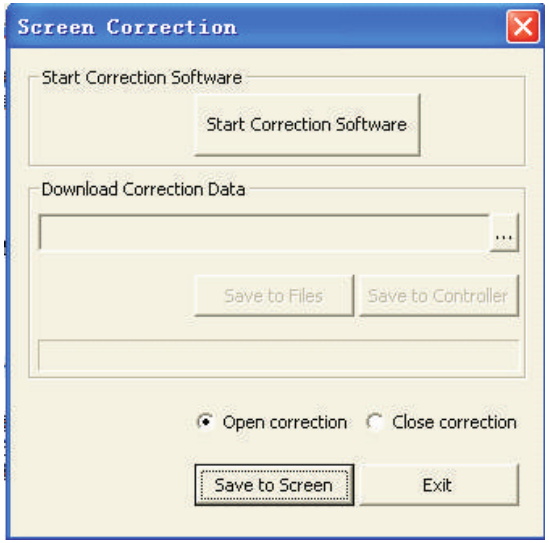
Picture 6-2

6.1.3 Check the calibration result

At the "display calibration", choose "Open",then click "save to LED dispaly" as showed in picture 6-3. Then you can see result of the spot to spot correction .

If the result of the spot to spot correction is not good, it can be cancelled. Choose "close", click save to the LED display. Then the calibration result disappear.

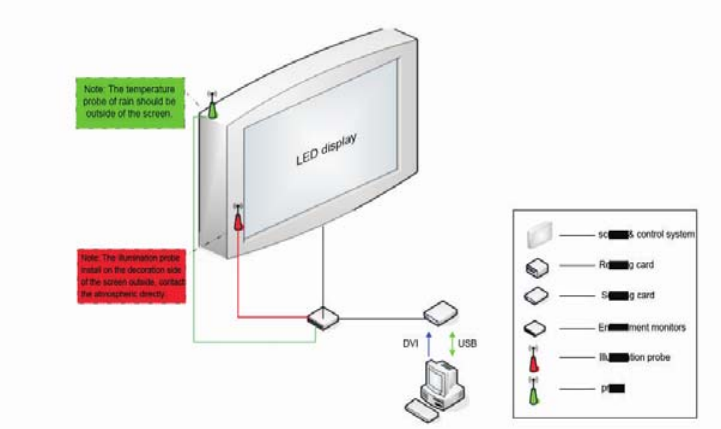
Note: If you want to save the result of the calibration, you need to choose "Open", then click "save to LED dispaly". At this time, the display shows the effect after the calibration. Then choose"exit".



Picture 6-1

6.2 Environmental monitoring

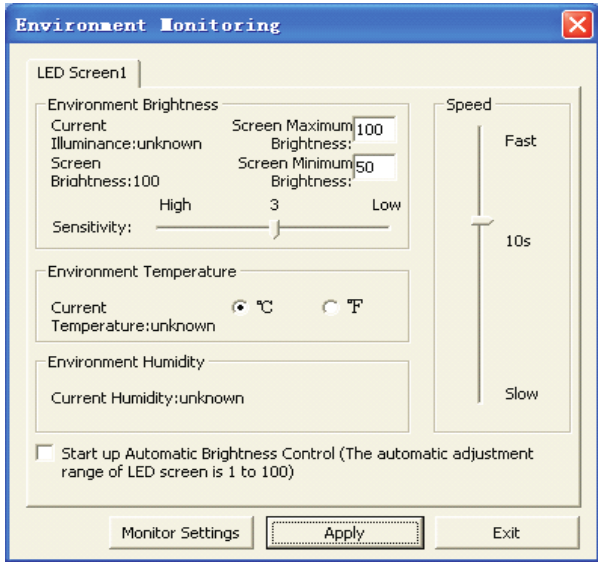
6.2.1 Installation Instruction



Instruction: Environmental monitoring equipment has its sensor of temperature and humidity and also the illumination intensity probe. The sensor of temperature and humidity has shield to protect itself from the wind, water(Rain). So it can be install at the outside of the display.The intensity probe is also protected from the wind and water and usually installed at the decoration edge part of the display, at the direction where the LED display faces.

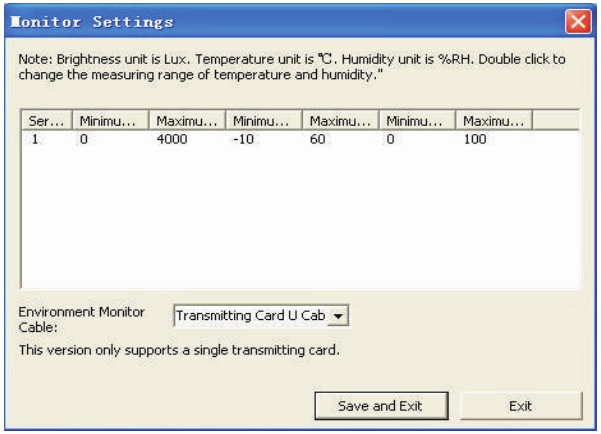
6.2.2 Software Operation

After connecting to the environmental monitoring equipment and the installation of sensors, open the software LED Manger 2010. Click the "Environmental monitoring" under the Menu under the "Set Up" to enter the interface as in the picture below.



At the page of "Environmental monitoring", the software will show the specific data of present illumination intensity , temperature and humidity. Besides, if temperature and humidity window has been added to the broadcasting program, the real-time parameter will be also showed on the LED display.

At the page of "Environmental monitoring", click the"Monitor equipment " button and the data can be set up for the Environmental monitoring equipment as in the picture below. The setting of the port for the sending cards which connected to the environmental monitoring equipment shall be proper, or the data can not be collected by the software in the right way. Besides, from the interface, we can see: the suggested range for illumination intensity probe is 0~4000Lux, for temperature sensor --10~60℃, humidity 0~100%RH.

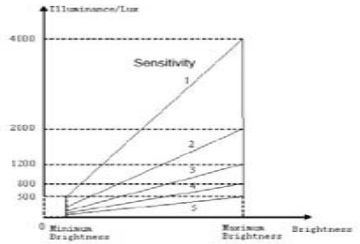

Monitor Settings
Note: Brightness unit is Lux. Temperature unit is ℃. Humidity unit is %RH. Double click to change the measuring range of temperature and humidity."
Ser... Minimu... Maximu... Minimu... Maximu... Minimu... Maximu...
1 0 4000 -10 60 0 100
Environment Monitor Cable:
Transmitting Card U Cab
This version only supports a single transmitting card.
Save and Exit
Exit

The software interface offers "allow the automatic adjust on brightness" reselection. If this item is chosen, in condition the software detects the environmental monitoring equipment, the brightness will be adjusted automatically according to the illumination intensity. If this item is not chosen, then the software only show the illumination intensity and will not do the automatically environment brightness adjustment . The option of "allow the automatic adjust on brightness" is as default.

The software interface offer four items: "Minimum brightness for LED display", "Maximum brightness for LED display","Present brightness for LED display","Sensitivity"

- **"Minimum brightness for LED display"** means the Minimum brightness (can not be less than this one) for LED display when the brightness is automatically controlled. The Maximum is 100, the minimum 1(only integer between 1 and 100, other numbers are not allowed). The Minimum brightness for LED display is as put in.The default number is 50.
- **"Maximum brightness for LED display"** means the Maximum brightness (can not be more than this one)for LED display when the brightness is automatically controlled. The Maximum is 100, the minimum 1(only integer between 1 and 100, other numbers are not allowed) .The Maximum brightness for LED display is as put in.The default number is 100.
- **"Present brightness for LED display"** means the brightness of the LED display at present. It shows the present brightness of the LED display in automatically control and is limited by the "Maximum brightness for LED display" and "Minimum brightness for LED display". It is between the two.
- **"Sensitivity"** offers 5 grades from 1 to 5. This decides the range of the illumination intensity the LED display can adapt to the outside environment. Please check the follow table and graph below:

Sensitivity	1(the maximum)	2	3(Default)	4	5(th minimum)
Range accordingly	0~4000Lux	0~2000Lux	0~1200Lux	0~800Lux	0~500Lux



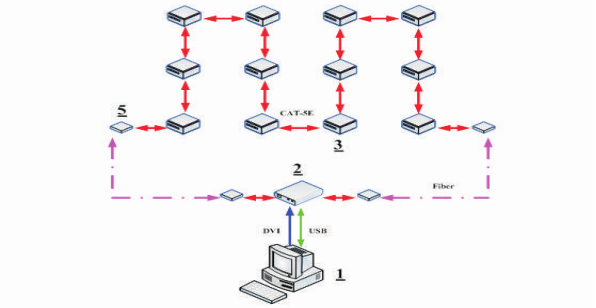
So according to real needs, the data for the "sampling rate" can be set up as 1s, 5s, 10s, 30s, 60s, 300s, 600s. This data decides the update frequency of the software for illumination intensity, humidity and temperature. For example, if 600s for the sample rate is chosen, then software will update the data of illumination intensity, humidity and temperature every 600 seconds and begin automatically control for the brightness for one time. The default number is 10s.

The instruction order for the Auto brightness adjustment(auto control of the environment brightness), timely brightness adjustment(timely instruction clock):

- Whether the auto brightness adjustment or the timely brightness adjustment start or not, the manual brightness adjustment can be done.
- When the auto brightness adjustment is on, the instruction of timely brightness adjustment will no long work. The auto brightness adjustment comes first.

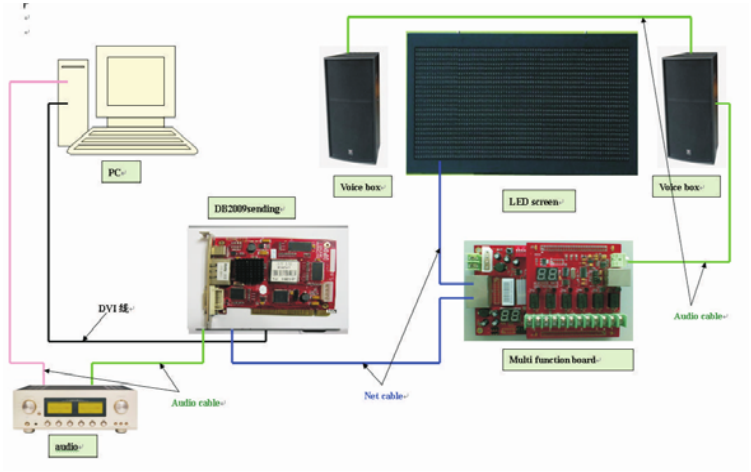
6.3 Optical fiber transmit

As in the graph as follow, the equipment 1 represent the computer, 2 the sending cards, 3 receiving card, 5 the optical electricity commutator. The equipments are usually connected by the cable CATS-5E. The communication distance is 100 meters. When the distance is more than 100 meters, the Fiber is suggested for communication: use the cable CATS-5E and optic-electrical commutator to connect the two equipments. Connect the optical-electrical transmitters with optical fiber cable. The Multi-model Fiber Optic can communicate in an distance within 500 m and for Single Fiber Optic,within 10 km. Additionally, the communicate distance for any of these equipments can be increased by connecting the optic-electrical commutator to the exterior.



SIMPLE INSTRUCTION BOOK FOR DBSTAR SYSTEM

一、Working Diagram for Synchronous system

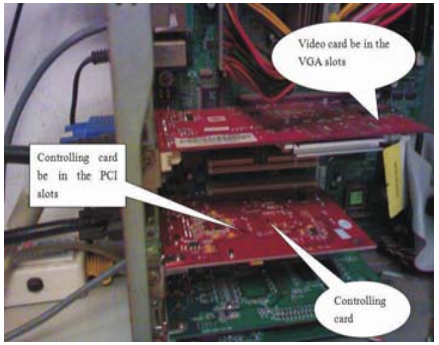


二、The computer and the installation

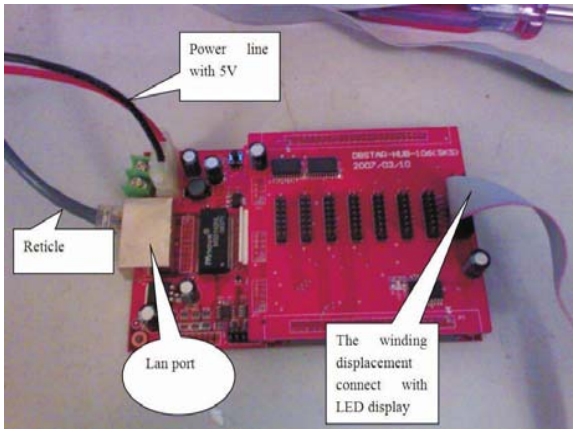
Main Board: with one empty insert slot, at least one USB port available
Hard discs: at least 100M space left after the installation of the operating system
Memory: at least 64M
CPU: better than Pentium 300MHZ
Graphic card: Standard VGA 256 display mode or more advance
Software environment: windows95/98/NT/2000/XP/VISTA
The Media player of Microsoft must be installed
The office 2000 must be installed if word files will open
Real Player shall be installed if real player files will be installed.
Any computer reached the above requirements is suitable for the control work

2.1 Installation of Graphic card, Main control card

Turn off the power, pull the plug out and open the main framebox
Insert the graphic card into the VGA slot
Insert the main control card into the PCI slot, as in the below picture showed:



The connection for the receiving card in the display



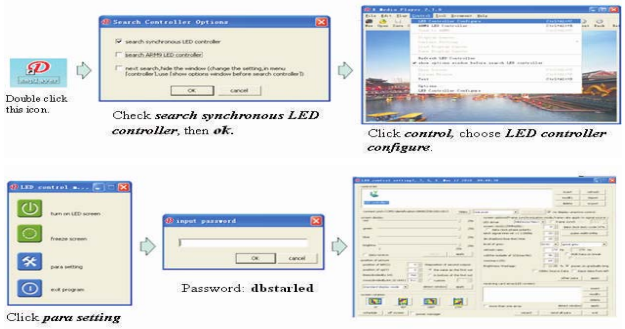
三、Notice

3.1 When finished the installation, pull out the net cable and turn on the LED screen. If it is an black screen, then the connection is right. If there are some bright points or lines, then the connection of the system do not connect well.

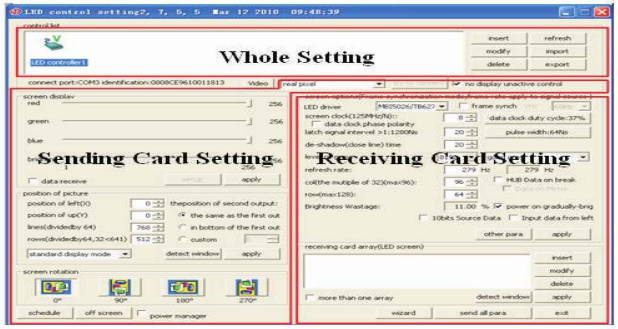
3.2 Please choose the net cable of good quality, or the communicate distance will be influenced.

四、The set up of computer parameter

The first step：


Double click this icon.
Check search synchronous LED controller, then ok.
Click control, choose LED controller configure.
Click para setting
Password: dbstarled

The second step:



Some problems should be noted when setting:

Sending card setting:

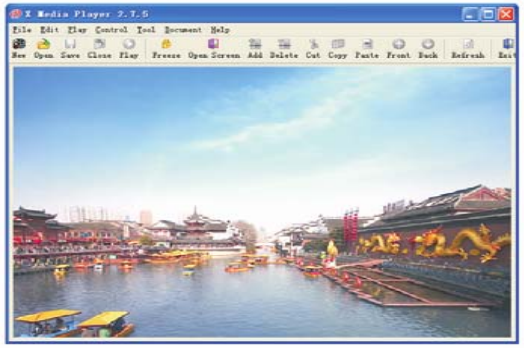
●It should depend on the display's resolution,when setting the output area of the image
●Timing instruction means executing the corresponding operation at the specific time.

Receiving card setting:

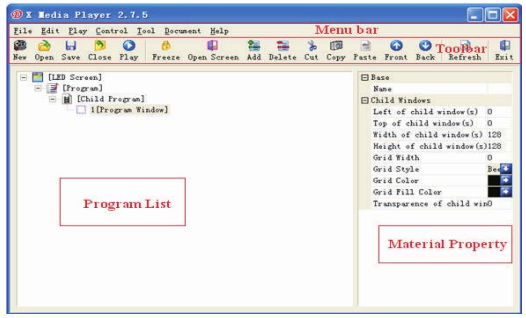
●The refresh rate setting, as the below situations:
Photographing by camera,without flash picture:above 600Hz.dual color:60-75Hz
Full color effect indoor :180-600Hz,outdoor:300-1200Hz
●Gray level setting:
Dual color 256,indoor full color 4096,outdoor full color 16384 will be ok.
●The selection of driving chip:
DBT-Q2007 the chips of the receiving card support: MBI5026,MBI5024,TB62726,TB595,MBI5027
DBT-Q2007 the chips of the receiving card support:
MBI5026 ,MBI5024,TB62726,TB595,MBI5030,MBI5039,MBI5042,MBI6030,MBI6020,DM413,LPD6803.

五、Simple software operating steps

Double click the icon of XMplayer,and entering the software interface after setting up the foftware.



The simple understanding ：

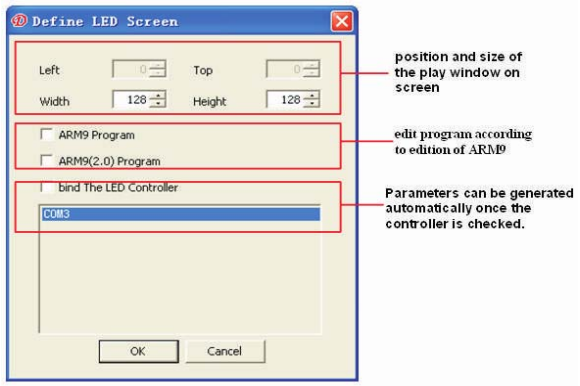


The process of program recording

The first step:setting the size of the broadcasting window.

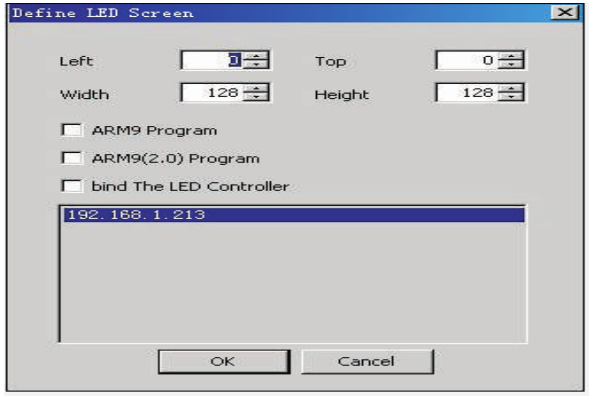
The size of the broadcasting window must be right,otherwise the program will show one part or not big enough,And there are 2 setting methods:

1.Setting the size of the broadcasting window at random according to customer's requirement, The specific procedure is as following:



According to the requirement, selecting, left, top, width, height,then click confirm button.

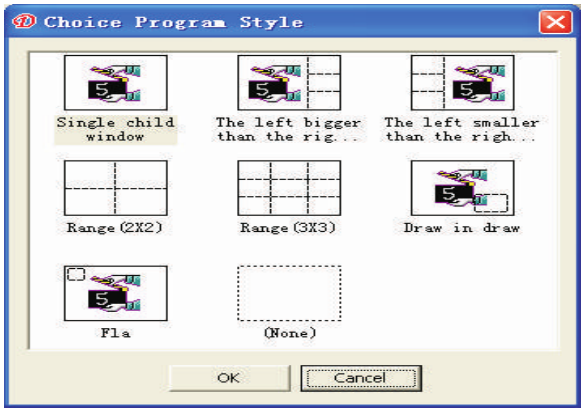
2.The customer binds the display,can get the size and location of the display automatically,the specific procedure is as following:



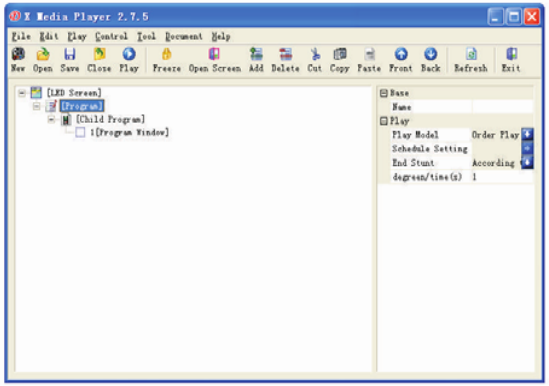
Clicking the confirm button will be ok.

The second step:establishing new program list

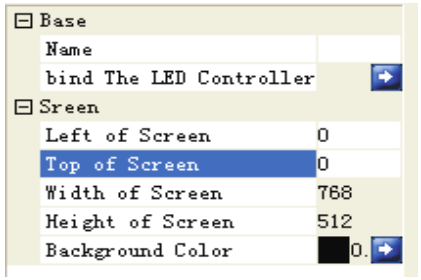
After setting the size,will appear a window like that:According to your own needs,choose the suitable one,the click confirm button..



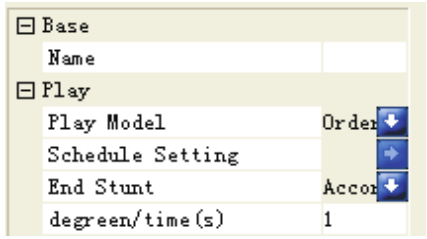
Click new button,like the below picture



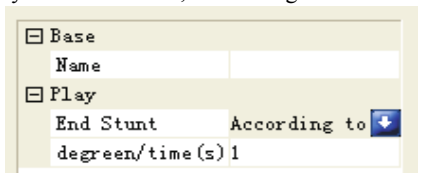
Left click LED screen,and the attribute list will be displayed.



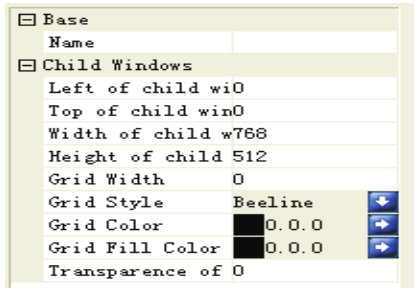
Left click "program"to display the attribute list,then setting.



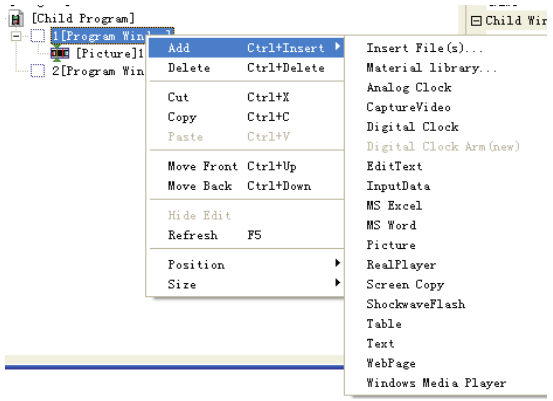
Left click "subprogram"to display the attribute list,then setting.



Left click x"program window" then setting,(x)means the serial number of the subprogram under the subprogram,like the bellow picture:

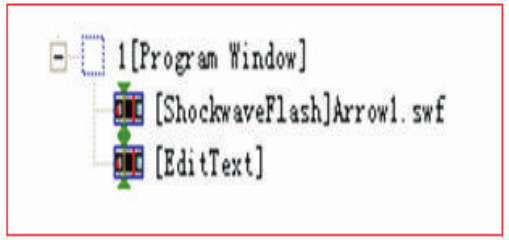


The third step:adding the program material.



The forth step:setting the program material option

According to the requirement, modifying the property after adding the material. Like the below picture.



Left clink LED screen to show attribute list.

The fifth step:clink save button after finishing the program editing.

The sixth step:broadcasting the program.Clink the play button in the tool bar,pause,or stop button.

六、Basic fault and eliminate

1. Interruption of the connection

The specific representation is :

1. Unsuccessful parameter sending and connection interruption will be suggested.
2. Failure to find the control card
3. The interface of the software fails to adjust,which means under gray status.The software<LED control equipment list> has no main control icon.

Solutions for probably way to solve problems:

1. Pull in and out USB wire again
2. Change USB wire
3. The equipment manager checks the equipment connection:
4. The computer is confirmed without virus.
5. If it is embedded ,Maybe the slot loose or PCI too dirty. Please insert again or use eraser to clear PCI interface.

2 . No-Signal output

The specific representation is:

The pilot lamp in the net mouth of the control car is not bright

Solutions for probably way to solve the problems:

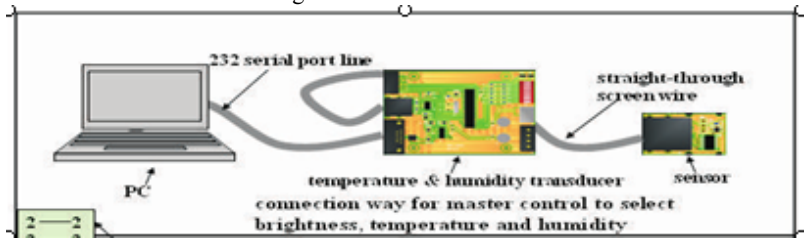
1. < XMplayer> of our company has not been installed and please determine to install.
2. Failure to open the FPD of the display card.
3. Right click my computer on the desktop->property→setting→senior→display---FPD
4. Incorrect resolution mode:

The specific representation is: The screen flashes or under uncontrollable status. Troubleshooting method. Adjust the current resolution of the computer to be in accordance with that of the control card.

7.Special function description:

Brightness sensor, temperature and humidity sensor.
Function: Adjust the brightness automatically and react led display temperature.

The connection schematic diagram is as follows:

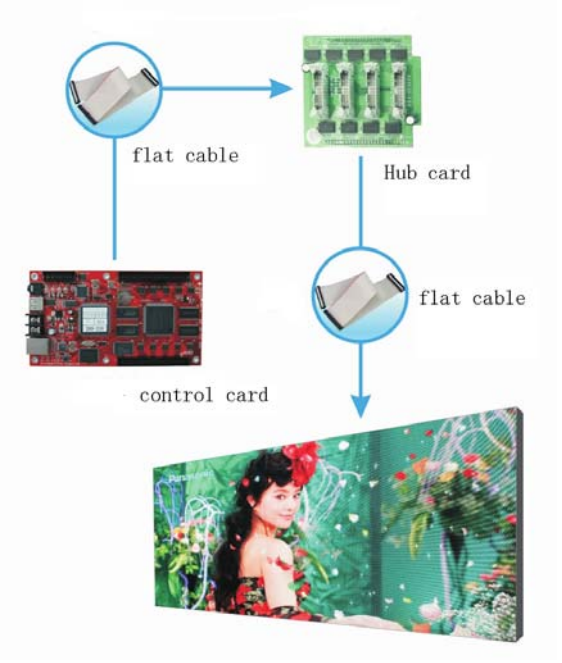

232 serial port line
straight-through screen wire
PC
temperature & humidity transducer
sensor
connection way for master control to select brightness, temperature and humidity

XI XUN BRIEF MANUAL

一、 System connection

1、 Hard ware connection

Hard ware connection as show in image 1-1 in below:

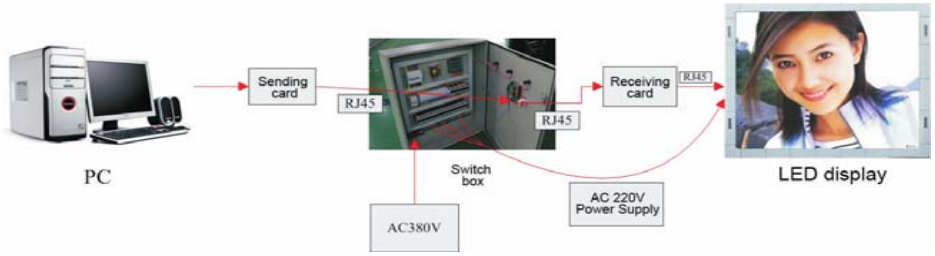


Picture 1-1

1. Connecting control card with Hub card by flat cable firmly.
2. Connection Hub card JI port with input port of led screen by flat cable
3. Accessing to power line and network
4. After control card on power, all indicators (Power, network and working) will turn on and blinking which means the control card will operating normally.

2、Connection diagram of computer and control card

Computer and control card of the display is connected by network cable, as shown in the picture 1-1 and 1-2



Picture 1-2

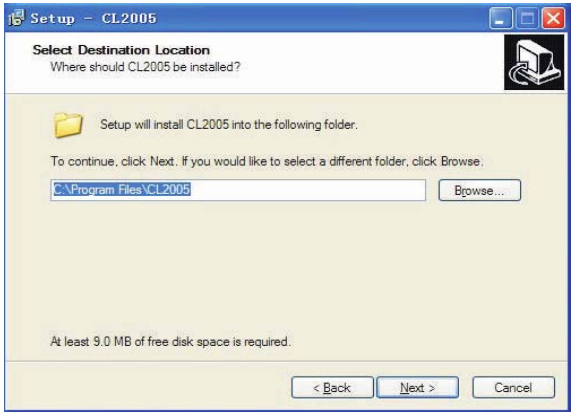
二、Computer selection and set up steps:

1、 Computer selection:

Operating system: simplified Chinese, traditional Chinese, English WINDOWS XP
Hardware configuration: CPU; Pentium 600HZ above; Memory: 512M; VGA Cards: Standard VGA 256 display mode above
Other software: media player of Microsoft company is needed.

2、Set-up steps: LED set 2.0 and led editor

2.1、Put the reinstallation CD of Led Editor into the CD-ROM, and it will appear the installation interface,(if it does not appear, pls choose this CD and double click the CD), as shown in picture 2-1. then choose the item of "install LedEitor", and operate it according to the screen instruction. Connection as shown in the following picture:


Setup - CL2005
Select Destination Location
Where should CL2005 be installed?
Setup will install CL2005 into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\CL2005
Browse...
At least 9.0 MB of free disk space is required.
< Back
Next >
Cancel

Picture 2-1

After installing successfully, it will appear the shortcut "lededitor", then double click it and will start the software.

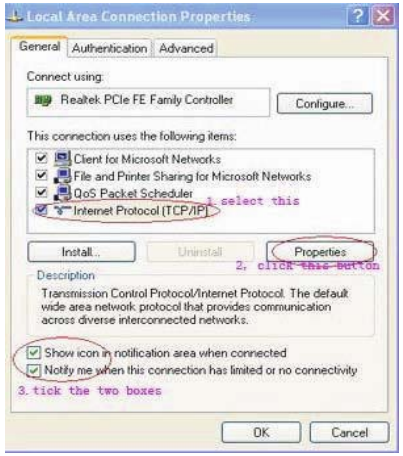
2.2、Set up of LED set 2.0

The software parts of led display from our company have already been set ok, and the install steps same to software install of lededitor.

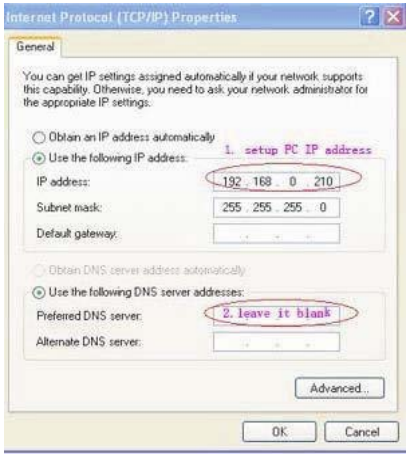
三、Important notice and set up of computer parameter

1、Set-up of computer IP address

If led set2.0 detects IP address automatically, this step can be omitted. If not, it need to set up IP address in the computer manually
Right click "Network Neighbourhood", choose "Property", open "network connection", then right click "local connection" icon, choose "Property", and open:



Picture 3-1

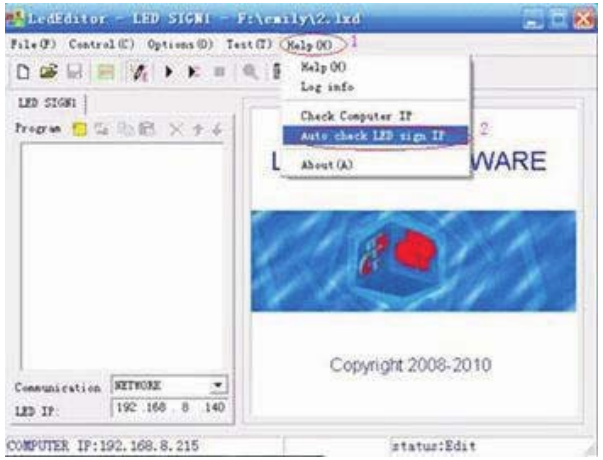

Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
1. setup PC IP address
IP address:
192 . 168 . 0 . 210
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
2. leave it blank
Alternate DNS server:
Advanced...
OK
Cancel

picture 3-2

In the picture of 3-1, start to set up according to the steps. Click "property" icon, open the following message box, as shown in the 3-2 picture, then single click "ok", and finish the set up. Pls notice that IP address subjects to 192.168.0.210.

2、Review LED display IP address in the Led editor

In the software of led editor, click "help" in the menu, open the follow window, as shown in 3-3 and 3-4 picture:



Picture 3-3

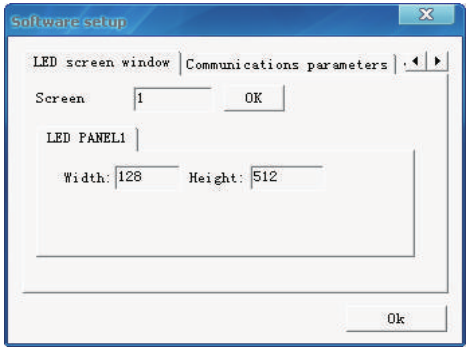
Picture 3-4

It can check IP address of led display in above picture 3-4

四、Operating of simply software set-up

1、Open software set-up

Single click “setup” menu in the main menus, and choose “software setup” in the pull-down menu and click it, as shown in picture 4-1



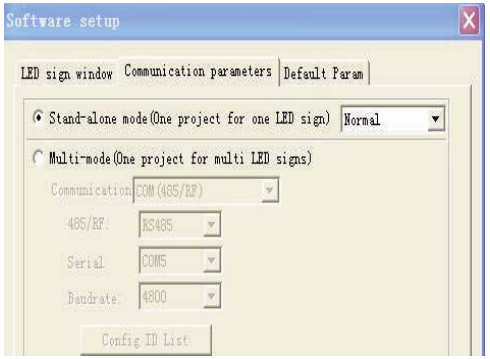
Picture 4-1

2、Software display setup

It can set up the item number of editable and browse item, usually the number is 1
The width and height of led display: it is used for editing item numbers and the size of browse window

3、Telecom parameter set up

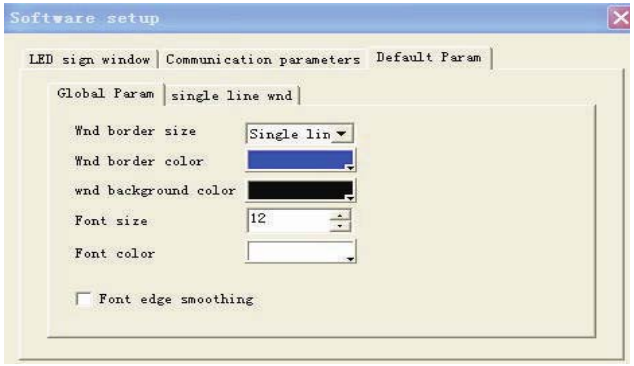
Choose telecom mode: single use mode and multi use mode



picture 4-2

4、Default parameters set up

Open item “default parameter set up” in the message window to set up the program page parameter.



Picture 4-3

Set the programs totally through setting up the width of borders, color of borders, background color of window, font size, and font color. It also can change this items to make other programs window.

五、The ways to deal with basic faults

1、When making single line word by using text box, the font can not be in vertical center or lack of half character?

Pls make the font height one word high by using single line test box.

2、The 32 height display can not display 16 height font in two lines when using text box to make multi-line words?

Pls make the words by using static text box. If window has border, the actual height of display is two times of 32 minus the width of borders.

3、The window size can not be changed by moving the mouse?

Pl check whether the window is locked or not, if locked, pls open the lock in advance, then can change the size by mouse, or by inputting the numbers to change the size.

4、Sometime the effects of previewing and making is not similar?

Pls subject to the showing effects of the led display. Because the preview of computer software does not include timed preview and so on.

5 、How to modify the language kinds of software?

This software can recognize the language according to different operating system automatically. If the operating system is English, the software only can run in English. At present, this software supports three langue: simplified Chinese, traditional Chinese and English.

6、How to check the sent program and operate the diary of big screen?

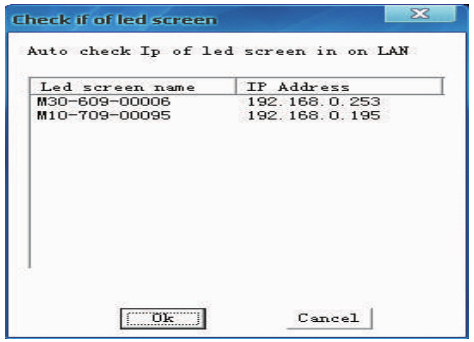
Menu—help—check communication diary

7、How to search the IP of connected led display automatically?

Menu—help—reach IP address of led display

8、If computer has multi network adapters, how to choose the network adapter of led display telecom?

Menu—help—check computer IP address



Picture 4-4

Pls choose the IP address connected with led display, and press icon “sure”

9、The added background pictures can not been deleted?

Pls delete all the routes of the background pictures, then it can delete the picture.

10、How to adjust the window place and the size fast?

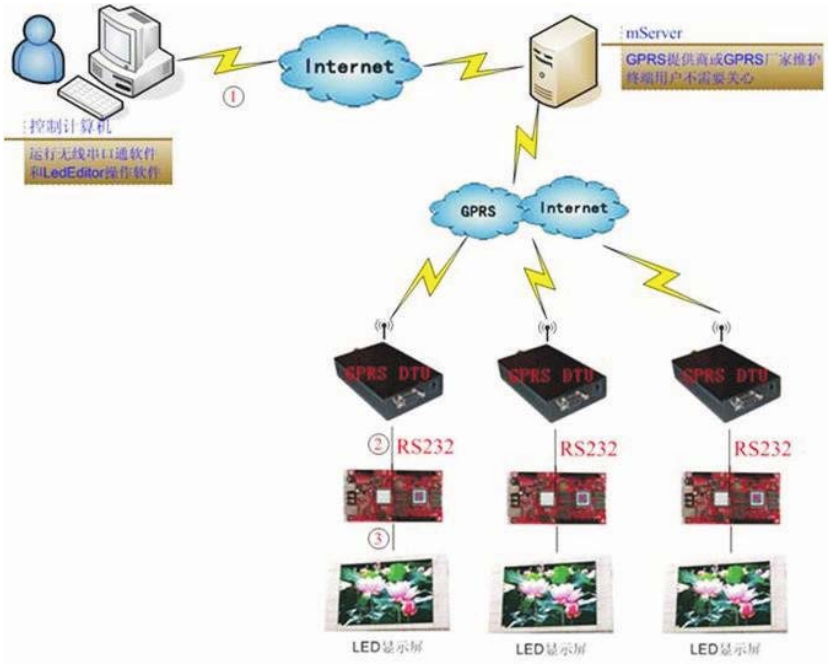
Right click the window, and it will appear the menu set up, as shown in the following picture:

Picture 4-5

五、The explain of special functions(wireless project)

1、The project of wireless GPRS

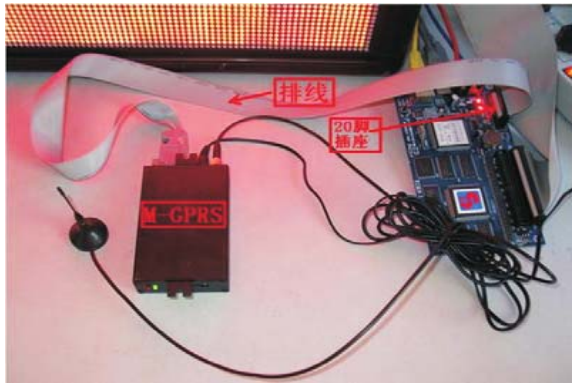
1.1 System topology picture:



Picture 5-1

1)The user computer and ADSL router is connected by standard network cables, ADSL router is connected with Internet by telephone, and also can by other ways.
2) Control cards and GPRS modules are connected by 232 communication.
3)Control cards and display are connected by common transfer boards and planar cables.

1.2 Hardware equipments connecting picture:

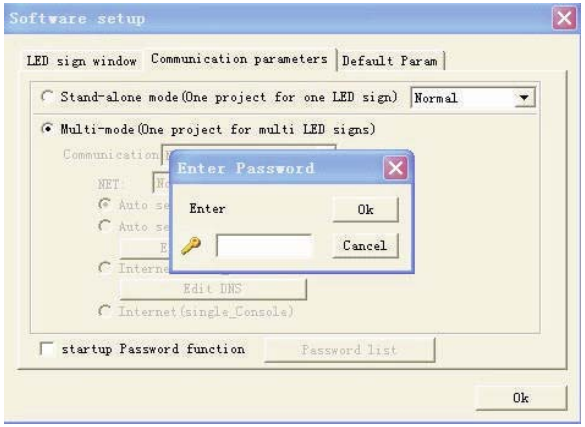


Picture 5-2

1.3 The ways of software set up

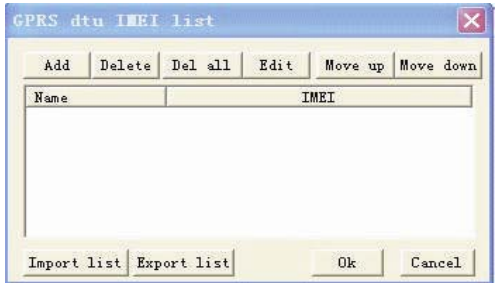
Lededitor configuration steps are listed as in following:

Menu—set up—software set up—telecom parameter: choose multi-use mode, input the password (default password is 888)
In the GPRS mode, choose IMEI telecom ways of terminal configuration, as shown in the following table:



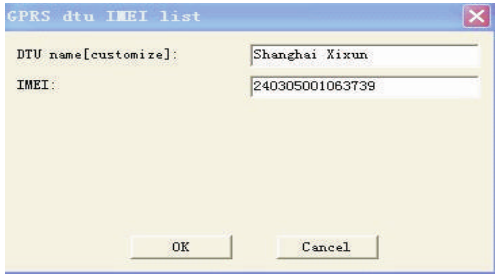
Picture 5-3

Open the message window ”GPRS terminal IMEI configuration ”, and set up the IMEI. Just as shown in the following:



Picture 5-4

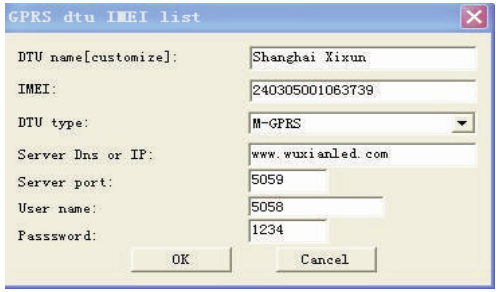
Click “add”. Add a terminal user, and make the setting. The interface is as follows:



Picture 5-5

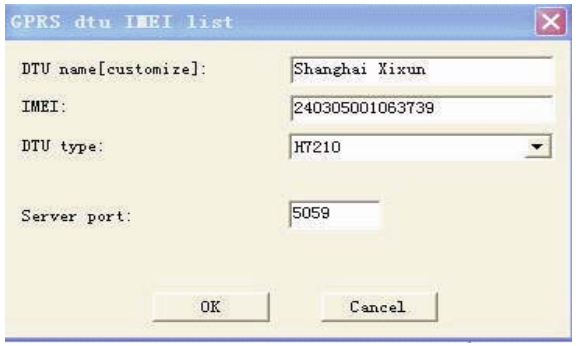
Note: Click “F5” to show the detailed terminal information of GPRS, and there is the option of another GPRS model H7210. Choose according to your request (choose one in two), as the follows:

Choose M-GPRS and the do the setting as the following interface (Note: the user does not need to change the content)



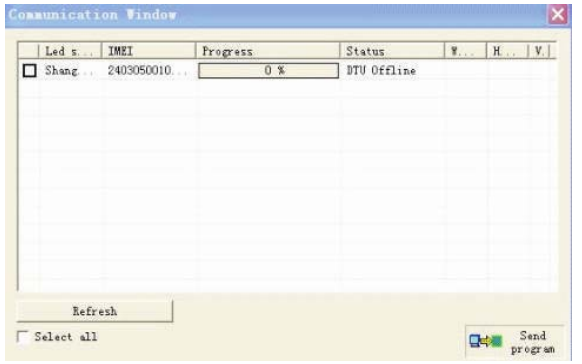
Picture 5-6

The setting of model H7210 is as the following interface



Picture 5-7

After setting, click OK to finish the setting for IMEI of GPRS terminal. After configuration, click “send programs” to get the sending program interface, and finish the configuration of GPRS communication scheme. As the following picture:



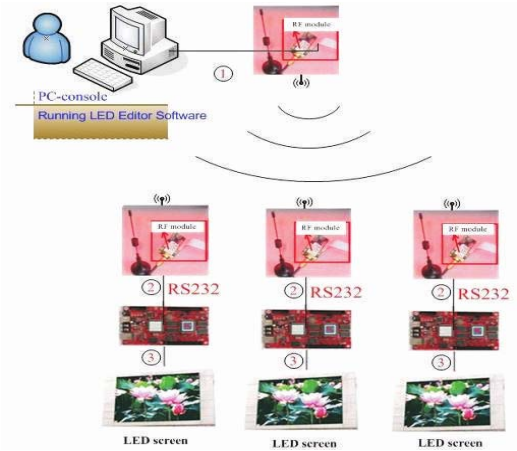
Picture 5-8

Note: Everything is ok if it is in China. It needs to change some parameters if it is out of China.

Please refer to the update and configuration for M-GPRS DTU in XIXUN LEDeditor9.0GPRS.

2. Wireless RF scheme

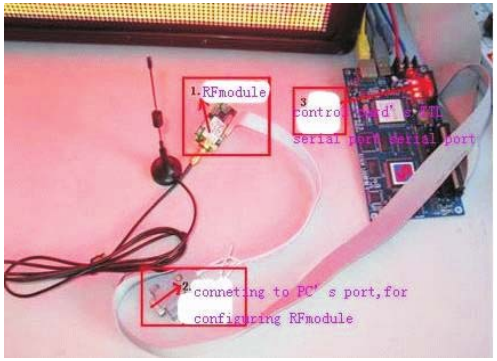
2.1. System topology diagram



Picture 5-9

1. The user's computer and the wireless RF module are connected through 232 COM
2. The controlling card and the wireless RF module are connected through 232 COM
3. The controlling card and the display are connected through the universal transferring card and the data line

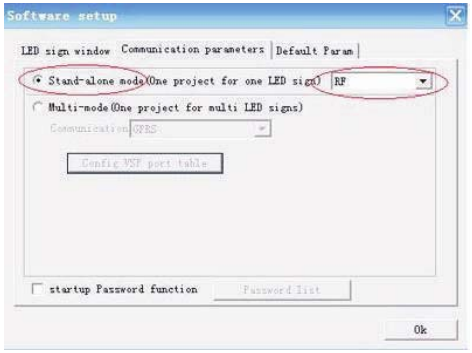
2.2. The connection diagram for the controlling card and the RF wireless module (the setting is done in the factory, and it just needs to be connected to the controlling card directly)



Picture 5-10

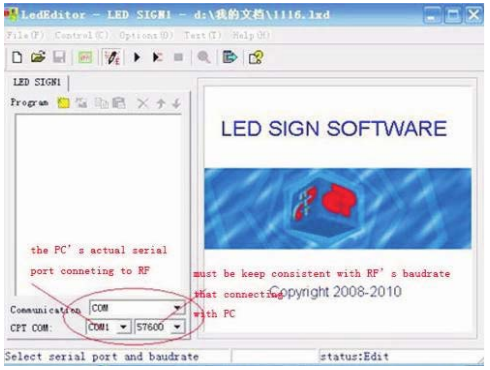
2.3. One computer controls one controlling card connected to the RF wireless module

The configuration steps for the LEDeditor are as follows:
Menu-setting-software setting-communication setting: choose stand-alone mode, and the RF communication mode



Picture 5-11

The connection of wireless RF for the display is the same as the ordinary connection for the display as follows:

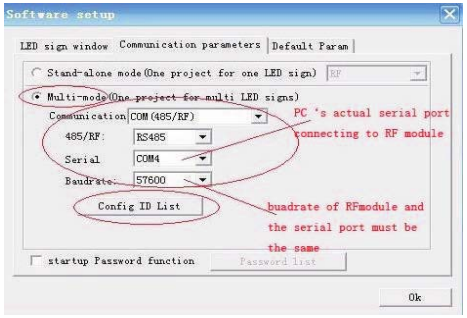


Picture 5-12

2.4. One computer controls one controlling card connected to many RF wireless module

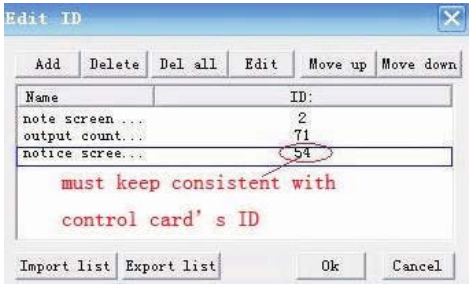
The configuration steps for the LEDeditor are as follows

Menu-setting-software setting-communication setting: choose many computers mode {input the password 168}
Choose COM (458 or RF)as the communication mode, and configured the related parameters for the COM, and the ID list for the display, as the following picture:



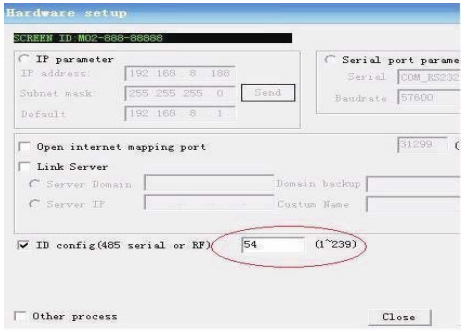
Picture 5-13

Configured the ID list for the display as the following picture:



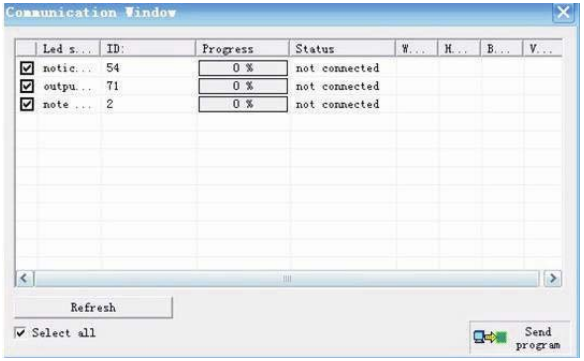
Picture 5-14

Can find the ID of the controlling card through the following steps: Menu-setting-hardware setting



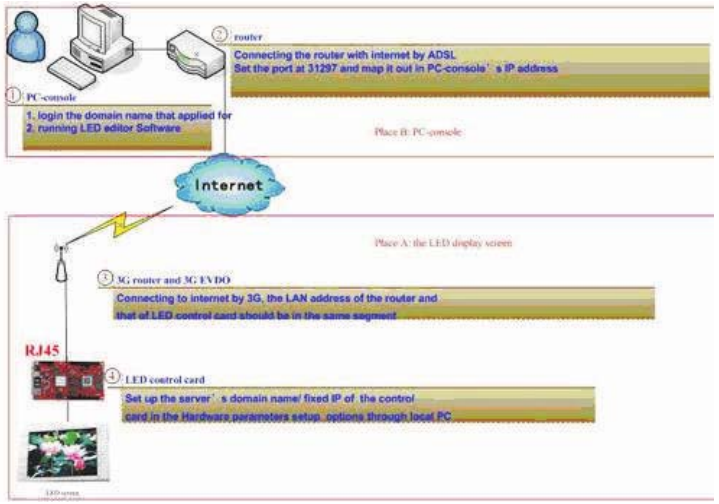
Picture 5-15

The picture showing sending diagrams under many computers mode through RF:



Picture 5-16

3.1. The system structure is as following picture:


router
Connecting the router with internet by ADSL
Set the port at 31297 and map it out in PC-console' s IP address
PC-console
1. login the domain name that applied for
2. running LED editor Software
Internet
3G router and 3G EVDO
Connecting to internet by 3G, the LAN address of the router and
RJ45
LED control card
Set up the server' s domain name/ fixed IP of the control
card in the Hardware parameters setup options through local PC

Picture 5-17

The brief description of the communication principle: LED controlling card connect to LEDeditor service center in the outlaying controlling computer via the parameter of the domain name, to build up communication line.

Example: Controlling the display in location B through the computer in location A

Preparation: apply for a dynamic domain name on the website: http://www.oray.com or other supplier for the dynamic (like alahover.gicp.net)

Location A:

1. LED display
2. A controlling card of XIXUN Series L
3. 3G router, Internet card of CDMA or EVDO3G

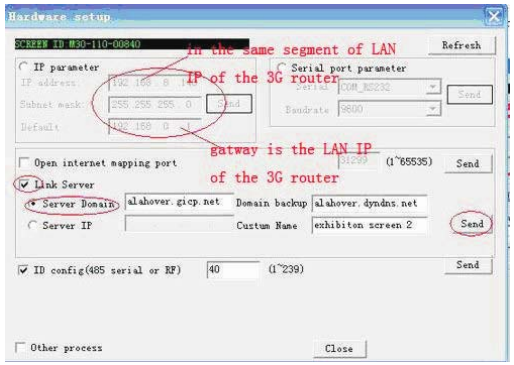
Note: The 3G router and the LED intelligent controlling card are connected through the cable, and they are in the same Internet phase.

Location B

1. One computer
2. Router ADSL connected to the internet

Construction operation steps:

The first step: Use one computer with LEDeditor software in location A to do the setting (4)the related parameter of the LED controlling card, refer to the following picture:
Distribute a domain name or IP address of computer server for the controlling card. Open the LEDeditor software, Menu-setting-hardware parameter setting-input password- as the following picture：



Picture 5-18

Note:

1. The user can apply for 2 dynamic domain name, one for main domain name (like alahover. Dyndns.org)(It is advised that 2 dynamic domain names should be from two different suppliers)
2. The display helps to remember the name, and helps the user to remember and recognize the display controlled by the controlling card.
3. If there is static and fixed IP address in the WAN that the controlling computer connect to, please use the server IP function to specify the static IP address that you own. After the configuration, please make sure that the controlling card is connected to the 3G router through the cable.

The second step:

In location B, (2) configured the transferring rule in the router setting
Input the address of router LAN (like 192.168.81) in the browser. Land on the router, and transfer the data of 31297 ports to (1) the IP address of the controlling computer like 192.168.81) in the transferring rule. Like the following picture:
Note: the service port is 312979 (this is fixed), if (1) the LAN of the computer is complicated, please ask the administrator to help with the setting. For example, if the port is forbidden by the administrator, please ask him to open it.

Picture 5-19

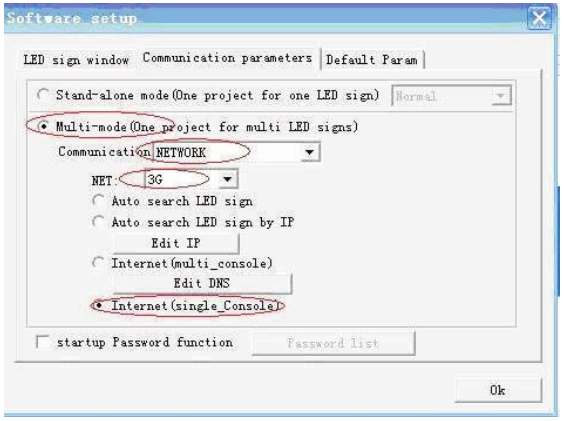
The third step: In location B, land on the applied dynamic domain name (there are two ways, and you can choose either of them).
The first way: Download the software offered by the supplier to the (1) computer, and land on the domain name, as the following picture：

Picture 5-20

The user can land on both the server's main domain name and also the spare domain name:
The second way:
If the router has the function for dynamic DNS, you can make the domain name landing in the router, as the following picture:

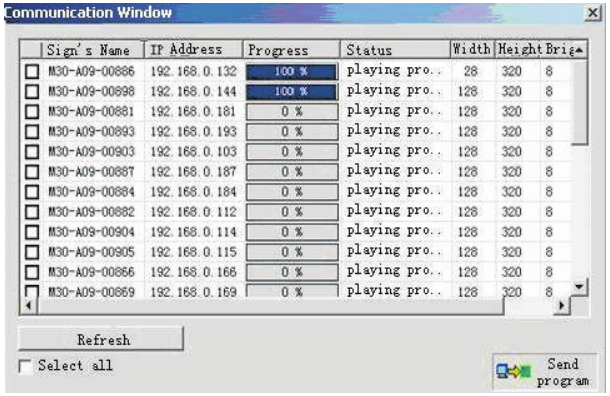
Picture 5-21

The forth step : ①Choose the configured parameters which are needed by 3G communication in the LedEditor software in the computer ,Menu-Setup-Software setup-communication parematers—multimachine mode-input the password code:888-As shown in the following picture.



Picture 5-22

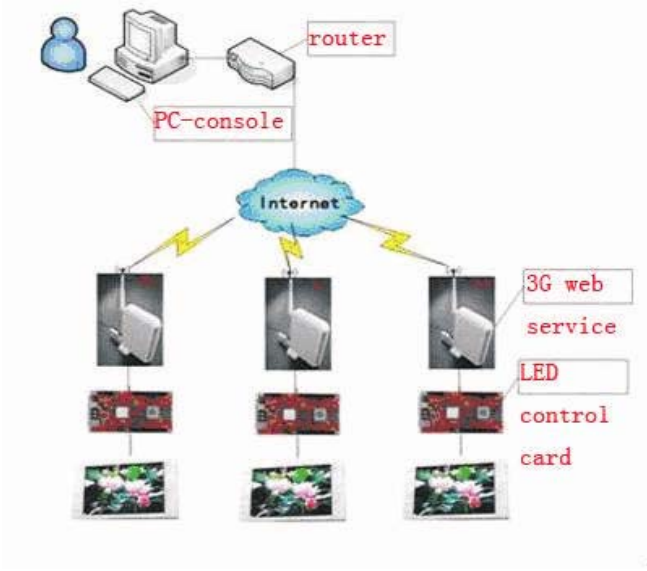
The fifth step: Configuration is completed ,①the LedEditor software can search the accessed LED controlling card customer automatically,and develop programs and switching the screen, Calibrate the clock ,adjust the brightness and the execution of the other instruction。 As shown in the following picture:



Picture 5-23

3.2 Using one computer to control many LED display screen

If use one computer to control many LED display screens, the setup way of every controlling card is completely same as the one of which when you use one computer to control one screen .， As shown in the following picture



Picture 5-24

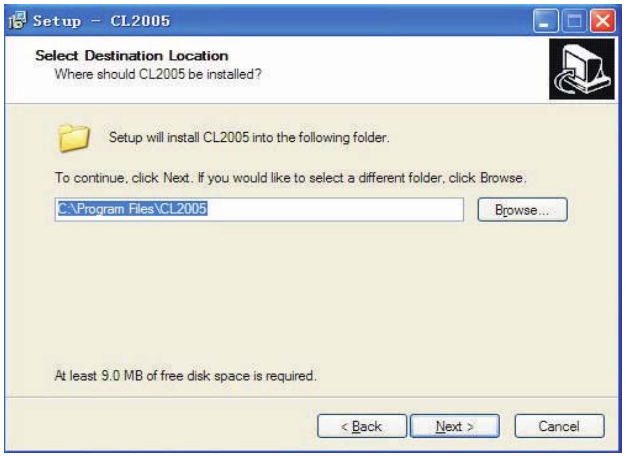
LIYAN MANUAL

Connecting diagram of the computer and the system and the diagram of the computer and the LED display screen:

一 、The pc upset and choose:

Running CL2005 system needs the support of Microsoft Office 2000 or Microsoft Office XP. We adopt you to run it under Windows XP and Office XP .

1.1 Intall ： Hardware configuration: CPU:Above Pentium 300MHZ .Memory :64M Video Card.Above Standard VGA256 display mode


Setup - CL2005
Select Destination Location
Where should CL2005 be installed?
Setup will install CL2005 into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\CL2005
Browse...
At least 9.0 MB of free disk space is required.
< Back
Next >
Cancel

Click “start” ,then you can install the management system of CL2005 communication screen into the computer

1.2 Running

In the menu of Start, choose Programme→ CL 2005 communication management system→CL2005 ,then you can startup CL2005 communication mamagement system ,

Shown in the following picture:

二、 Setup the computer configuration

Communication :

In the Main Menu :click Ste up → Communication , then there will be a communication setup window .

In the “Mode” menu,Choose serial communication、 Ethernet or modem.. Usually, Can use Serial communication mode.RS422 or RS485 network model can be grouped in the serial communication.

Setup the screen’s specification :

In the main menu of CL2005,click ”Set up”-→display screen, There will be the screen’s specification setting up window .

If using the serial communication mode,the computer and the controlling card have been connected ,and they have been connected to the power supply .then we can use Automatic Searching function to decide the specification the serial communication port of the connected display screen and the computer , communication speed and display screen .

三、Operation steps of easy software:

In the file selection area , select the drive, folder, and then in the file name lis, double-click the file name ,which you want to upload, then the selected file name will appear in the " send to the screen’s picture " and "picture playback order".

There are five buttons under the "send to the screen’s picture "item .Edit, Delete, .Make/Cancel the Clock background, Input the words directly and Play immediately.

DELETE : Choose one picture or files in other format, then click DELETE button , then can delete the file from the send to the screen's picture item. This operation cannot physically delete the files stored in the computer.

EDIT : Choose one picture of files in other format , click EDIT button , then the associated Edit program starts automatically. then can edit the file .

Make/Cancel the Clock background: If the chosen file is in JEPG format , then the file can be used to the background for the showing time ,safe days, temperature, humidity and so on .User can choose the main menu "Tools"→ Setting the clock layout, then can arrange the showing place of the above shown comments,(Regarding to the Chapter 6).This function is especially suitable for situation the big size date ,time or temperature , humidity or safe days

INPUT THE WORDS DIRECTLY :Input the words directly through the keyboard or Copy ,or Paster operation.
PLAY IMMEDIATELY :Click" Play immediately." Button , the comments shown in the View and Edit window can be sent to the LED display screen to play .immediately .When it is finished ,the LED display screen will return and continue to play its original program .

四 、Basic trouble shooting:

●The procedure of End " Change scanning way" :

When user change the Scanning way ,Due to unintentionally close the power supply of the controlling card or the CL2005 Program , the changing procedure is end, then cannot find the controlling card .
Solution : choose the communication port in the Set up menu, and the type of the card , then choose: Tools→Controlling card set up -→Input the password → Search -→ Delete →Last CPLD program fail→Conform.

●Communication initialization is failed

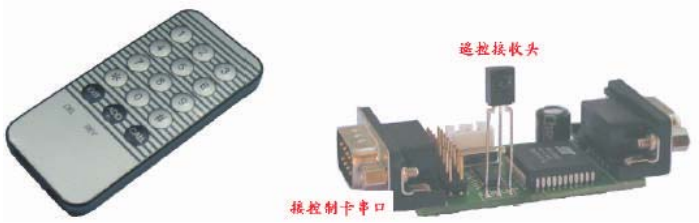
Solution : Check whether there is another program occupying the selected communication port of the program ..If necessary, run the CL2005 program to send the data after restarting the computer.

●There is a pause in the final scene of the Continuous moving left text

The enter into way of the first act is different as the one of the last .or there is residence time, or there is no sign to follow the last act closely
Solution: Make the moving effect of the first act same as the one of the final act , Or add a blank act after the final act. Or make the moving effect of the final act same as the one of the blank act.

五、Specific function

Rf control:



Remote controller has many function, it can choose 10 image at most from 90 images , and these 10 images can be played without stop, It can adjust the playback speed , it can adjust the brightness of the screen. Note : you need to use CL2005 software to upload character dot-matrix database before many operation begins.

Remote control operation need the cooperation of the remote controlling receiving board .The CPU chip of the remote controlling receiving board will translate the keys of the remote controller into some communication orders of the CL2005, then send the orders to CL2005 controlling card through serial port..
Operation method of the multiple choice remote controller .is as follows:

1 Adjust the brightness

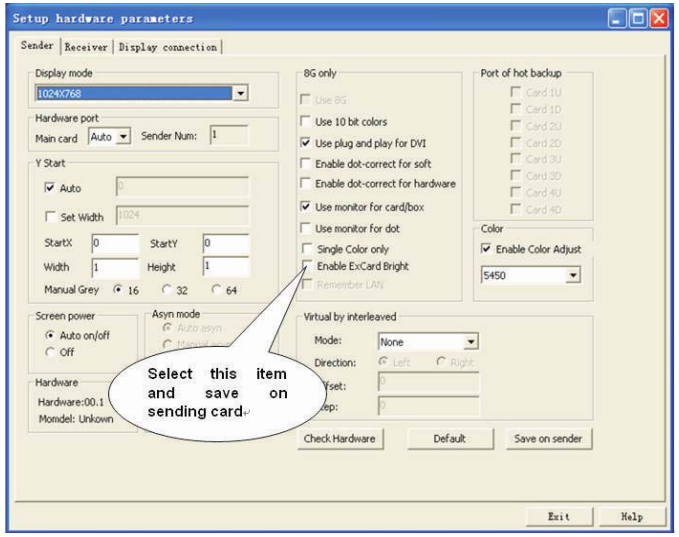
When you press down the CALL key , the brightness of the screen will be improved to a higher grade. When you press down CALL key once it is the eighth grade , the brightness of the screen will be returned to the first grade .It changes circularly in this way.

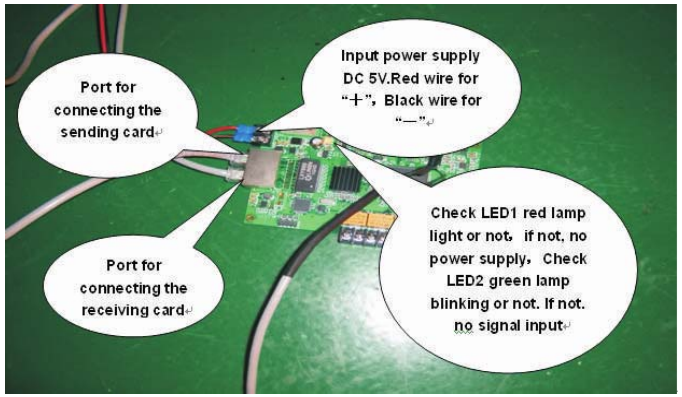
2 Choose the picture

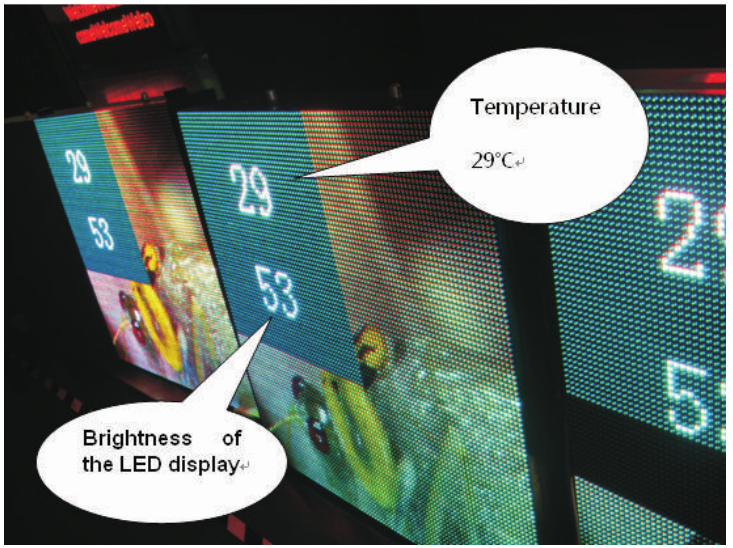
A 、Press Exit key , enter into the process of choosing the picture. During the process , press Exit key again , you will cancel all options, and get back to the original chosen contents to playback.
B 、During the process of choosing the pictures, the display screen will show "figure XX" words, it indicates that which picture is displayed currently, Now, you can press the Number keys to choose other pictures.
C 、If the picture ,which is shown by the input Number keys, is valid, then it shows that the screen will load this picture. Now, you can press: ADD key, to change the entering rate of the picture circularly.
D 、After loading the picture, if you are sure that you want to put this picture into the new playback sequence ,pls press"*' key, Now , the screen will still show the selected picture just now .but the prompt text will be "figure —",it shows it waits for the new input .
E 、If the entered Number exceeds the number of the effective pictures, the prompting of the screen will be :figure ---" also ;
After choosing the pictures, which need to be playback, press"#" to save, the screen will start to playback in the new sequence.

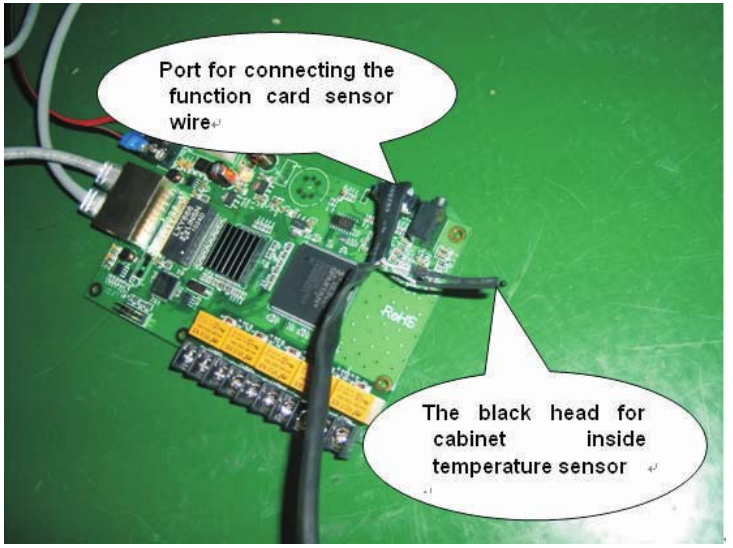
THE INTRODUCTION OF THE SYSTEM AROUND THE SCREEN

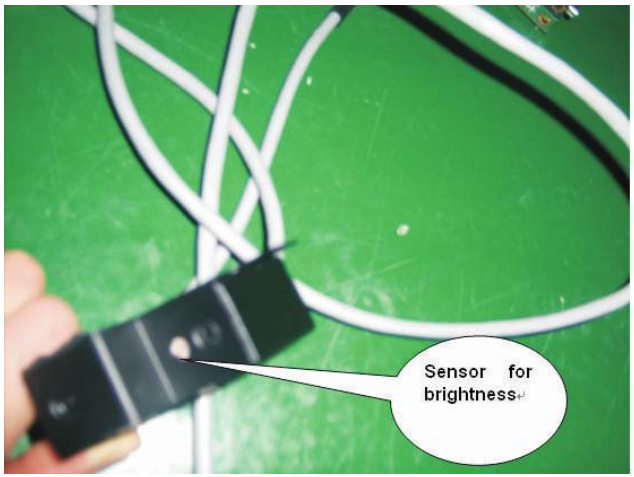
一、 Multi-function card connection diagram




Port for connecting the sending card
Input power supply DC 5V.Red wire for "+", Black wire for "—"
Port for connecting the receiving card
Check LED1 red lamp light or not, if not, no power supply, Check LED2 green lamp blinking or not. If not. no signal input



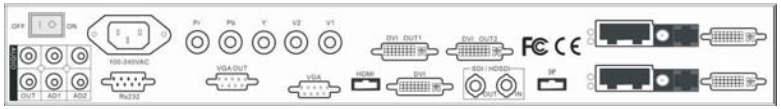




二、Video processor introduction

1.Hardware connection

1.1Rear signal interface frame



1.2Interface introduction

1.2.1 Video signal input

LVP601 support 8 lines video signal input as following

Port name	Description
V1~V2	2-channel PAL/NTSC composite video input
DP(Display Port)	1-channel Display Port digital SD/HD signal input
YPbPr	1-channel SD/HD component signal input
VGA	1-channel computer analog signal input
DVI	1-channel computer digital signal input
HDMI	1-channel digital SD/HD signal input
SDI/HDSDI(IN)	1-channel digital video signal input(HD digital video)

1.2.2 Audio input

LVP601 supports 5-channel stereo audio switch. Of which, 2 channels are DP, HDMI and SDI audios, the other 2 channels are AD1, AD2 external input audio. AD1 and AD2 can be mapped to the any one of all video inputs, and will be switched synchronous to the selection of video input signals.

1.2.3 Video output Description

Port name	Description
VGA OUT	1-channel analog RGBHV signal output, it can be connected to a local display device and used as monitor (it is strongly recommended to use this port when operating and setting LVP601+).
DVI OUT 1 / DVI OUT 2	2 same DVI digital graphic signal output, it can be connected with external LED transmission card or LED transmission box

1.2.4 Audio Output (AUDIO OUT)

Corresponds to the selected video input signal, output this channel audio input signals.

1.2.5 Signals of other parts

RS232 serial communication port

2.Frontal panel operations

2.1 Diagram of frontal panel

2.2 Button instructions(operation mode)

LVP601 has 14 frontal panel buttons, these buttons are in the boot mode of operation, its functions are as follows:

2.2.1 Select input video source

Button names	Description
V1, V2	Select V1, V2 BNC port from which signal is input
DP	Select Display Port from which signal is input
YPbPr	Select component signal input
VGA	Select computer analog signal input
DVI	Select computer digital signal input
HDMI	Select HDMI digital signal input
SDI	Select SDI digital signal input(HDSDI)

Switch audio input while operating above buttons; select the audio signal input from corresponding video input to output it through Audio OUT.

Notes: when user has selected input signal, the current input signal source that you selected, e.g.: HDMI will appear in the first line in LCD, and the status of current input signal source will appear in the second line. If there are no valid signal input, "No Input" will appear in the screen and dark screen will be displayed on the LED screen; if the signal is valid, the input signal format, e.g.: " 1080p_60Hz " will appear in the screen.

2.2.2 Select output brightness

Button names	Description
BRT -	Decrease output image brightness of LVP601+, the lowest brightness is 0.
BRT +	Increase output image brightness of LVP601+, the highest brightness is 64.

LVP601 supports 32 levels Brightness, "0" represents the lowest brightness, and 64 represent the highest brightness. To ensure full gray level of output image, normally the output brightness is set as 64!

2.2.3 VGA input auto adjustment (Auto)

When the current VGA input source of LVP601 is a valid signal, press this button, LVP601 will automatically adjust the sampling parameters of the VGA signals, so as to make VGA picture clean and complete.
In general, this operation is made only when new VGA signal source is to be connected in. The time spent in auto adjust depends on the conditions of signal source, but will be no longer than 1 minutes. Sometimes user need repetitively do such adjustment till VGA picture looks clean, complete and stable.

2.2.4 Information display

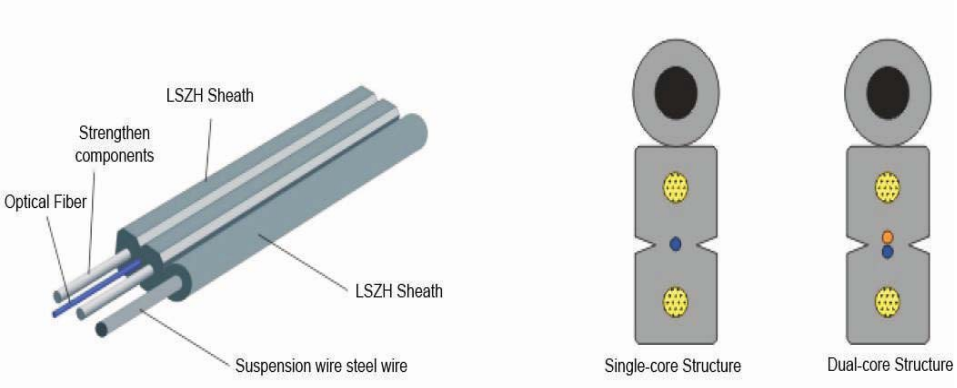
Press this button to view current settings and information of LVP601, it consists of 17 items. If you press "Info" again before LVP601 exit information display, LVP601 will continue to display the next item of information.

2.2.5 Select Full/Part display (Full, Part)

The operation is made only to switch over when the input signal is PC (DVI / VGA/ DP/HDMI). Other input signals can work only in the full display.

Button names	Description
Full	Full means that LED will display a full picture.
Part	Part means that LED only display a part of a picture.

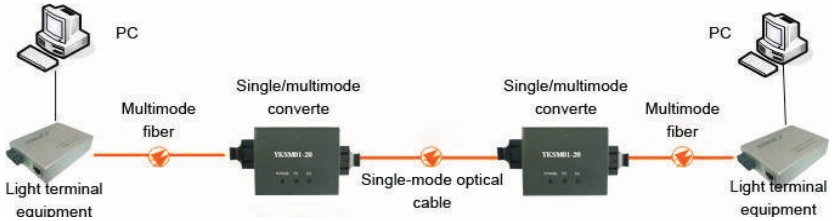
三、Fiber Optical Transceiver



1. Product model: LQIC485OPT.05.0

2. Main Technical Parameters

Working Voltage: DC 5V Voltage Range: DC 4.8V~ DC 5.3V
Working Current: ≤ 200 MA
Fiber Model: Single mode 1310 nm optical fiber
Transmission Range: ≤ 30 Km (single mode)
Transmitting Media: Single mode optical fiber
Environment conditions: Humidity -10～+50℃
Relative Humidity: ≤90%（40±2℃



3. Input and output interfaces and installation methods:

This product has a set of external optical interface, a 485 and a power supply interface device 485 via optical fiber high-speed long-distance point to point communication.

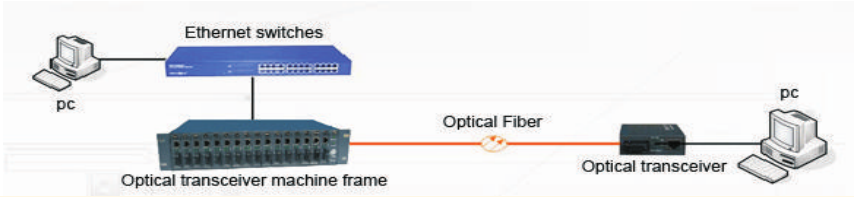
3.1 There are 485 bus interface polarity: two lines, "A" high then 485, "B" received 485 low

3.2 485 used RVS 1.0 mm2 ordinary unshielded twisted pair, communication distance up to 1.2 Km, significantly reducing the project cables by significantly reducing the project cost. And the more coarse twisted pair, communication distance farther, better communication, the use of shielded twisted pair, communication better. 485 Communication speed: 0 ~ 1 Mbps any rate adaptation.

3.3 DC5V power supply access: "DC5V +" received a 5-volt DC power supply positive, "GND" received a 5-volt DC power supply negative. If it does not work, check the wiring is correct.
3.4 Polarized optical interface: dual SC connectors, "TX" then another converter "RX", "RX" then another converter "TX"

3.5 Optical port communication speed: 0 ~ 5Mbps any rate adaptation.

3.6 Fiber Pigtail (or jumper) and laying fiber optic cable project between the use of welding



technology.

4. Function:

4.1 This product is used to extend the distance communication network 485, using optical fiber for signal transmission medium, with transmission distance, transmission frequency bandwidth, good insulation, anti-radiation, anti-interference ability, light weight, corrosion resistance etc.. Especially suitable for nuclear radiation zone, EHV power systems, electromagnetic interference areas, mined areas, highly corrosive environment, flammable and explosive areas and so on.

4.2 Use the "RS485-fiber converter" can be connected to 485 and fiber optic. Require long-distance interference when converted to optical fiber transmission, need to connect communication devices 485 when converted to 485.

4.3 Two-way communication, nanosecond conversion, communication speed, plug and play, transparent.
5. Notes:

5.1 Fiber converter must be doubled. Polarity can not be reversed

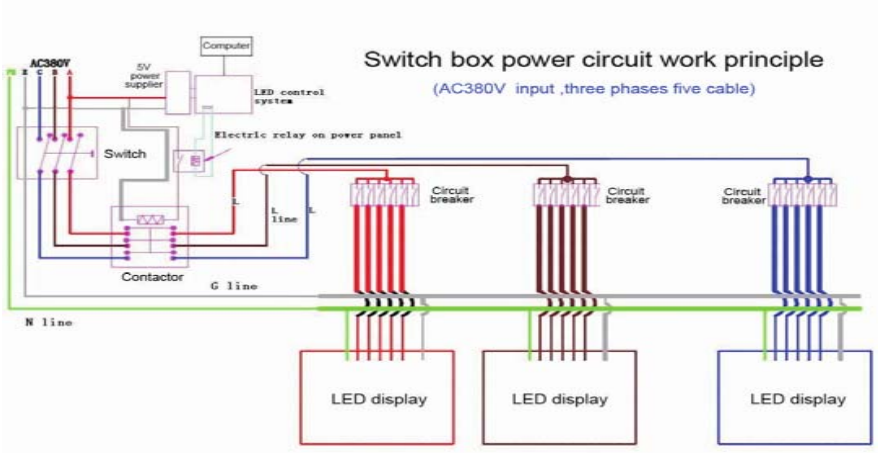
5.2 TX, RX fiber port is not connected before, should be added with a protective plastic cover to prevent dust and other impurities to enter the port inside.

5.3 Fiber bend radius is not less than 0.5m.

四、LED Distribution box

1. Distribution box function summary
The function of distribution box is to transfer electricity to all the parts, when short circuit, overload and electricity leakage happen, the distribution box will turn off the power to protect the LED display. Main function: Provide electricity power to LED, AC 380V input, air switch protection, 220v output, special designed cabinet; prevent leakage, power indicator light.

2.Distribution box circuit schematic program



3.Distribution box component description

3.1 3P air switch: The air switch is a very important part in low-voltage distribution system, it has control and protection function. In addition to start and break circuit, also can provide protection when short circuit, overload and leakage happen, mean well, it can be used to start electromotor infrequently.

3.2 5 V Power supply: Provide control system and multi-function card 5 V power.

3.3 Arrester: Can release lightning and the over-voltage caused by power system operating, to protect electrical equipment against transient voltage damage, it also can cut off the freewheeling without causing short-circuit electrical system grounding device. Arrester is usually connected to live wire to ground, in parallel with the protected equipment. When the voltage over the required operating voltage, the arrester immediately action flow through the charge to limit over-voltage amplitude, to protect equipment insulation; voltage normal, surge arresters and rapid restitution, to ensure the normal power supply.

3.4 Small breaker: Divided according to their use of high-voltage circuit breaker circuit breakers and low voltage circuit breakers, high voltage lines into more obscure, more generally known as high-voltage electrical 3 KW, low-voltage circuit breakers, also known as automatic switches, commonly known as "air switch" also refers to the low voltage circuit device, it is both a manual switch roles, but also automatic loss of pressure, voltage, overload and short circuit protection of electrical appliances. It can be used to distribute electrical energy, do not frequent start asynchronous motors, power lines and motors for the implementation of protection when they severe overload or short circuit and under voltage fault can automatically cut off the circuit, its function is equivalent to fuse switches and due to a combination of thermal relay.

3.5 Contactor: Refers to the use of industrial electric current flowing through the coil generates a magnetic field, the contact is closed, in order to control the electrical load. Contactor by the electromagnetic system (core, core static, electromagnetic coil) contact system (normally open contact and normally closed contact) and interrupter device component. The principle is that exposure to the electromagnetic coil when energized, will produce a strong magnetic field, the static electromagnetic suction to attract the armature core, and promote the contact action: normally closed contact is open; normally open contact closure; the two are linkage. When the coil power, the electromagnetic suction disappeared, the armature is released under the action of the spring release of the contact recovery: normally closed contact is closed; normally open contact is disconnected.

3.6 Terminal: Role of connecting wires.

3.7 Multi-function card: Multi-function card has the temperature and humidity, switching power supply of display and voice transmission functions.

3.8 Button switch

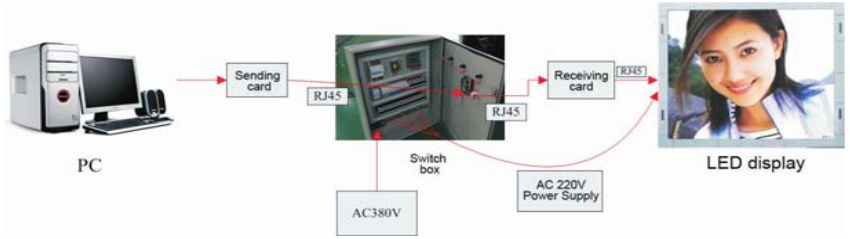
3.9 Indicator light

4. Distribution box operating instructions and precautions

4.1 The components and wires in the box should be good connect without heating and burning phenomenon. The door of distribution box of should be in good condition; lock should have someone care.

4.2 Distribution box should be cleaned and maintenance regularly, so that equipment is always in good working condition.

5. Connection layout of distribution box and external electrical equipment.



6. Distribution box main features.

6.1 Provide AC 220 V power supply

6.2 Use PC, manual operation and sensor trigger to shut down the power in case of emergency.

6.3 Distribution box has 4 wheels which can be easily moved.

6.4 Stable and reliable performance

6.5 AC 380 V power supply, prevent lightning.

THE USAGE OF THE LED DISPLAY,MAINTENANCE AND REPAIR

Part one: The usage of the LED display and maintenance

Ⅰ. Switch and the using of the hardware

1. Switch process

Turn on the screen

A. Power on all equipment (to ensure input voltage meet products requirement, and L/N/G corresponding right)
B. Turn on the computer, please ensure graphic card setting is right (incorrect it will be no show scenes, named blank screen)
C. Turn on the controlling software, setting the basic pixels size and display area (this setting won't affect the show of LED display screen);
D. Power on the screen one by one accordance to net cable connect, after the prevision screen have the signal, then continue to the next power-on, if the screen powered on without signal, before next power on please check the reason.

Turn off the screen

A. Turn off LED screen power supply

B. Turn off the controlling software

C. Turn off the computer right

2. Switch screen interval should be more than 5 minutes

3. Can't turn on the screen with the condition of may cause screen without the controlling system control

A. The computer didn't enter into controlling software system;

B. The power supply of the controlling part without turn on

4. When display failure, please turn off the screen in time, and please examine the reason (the specification reason please refer to the troubleshooting part)

5. The switch of display often trip, please examine the screen in time or change the switch.

6. The LED screen light-emitting area can't hit by hard object or extrusion

Ⅱ. The using of the controlling system

1. The power supply zero and battle line of the computer and the controlling part is not allowed to access anti-Line. If there is peripheral, after connection well, you should test the machine case charged or not.

2. The controlling computer can only be used for LED display operation, can't be used for others, without the remote control, it would be better not connecting with the internet.

3. If you need the controlling equipment of move computer, Please check the power cable connect, controlling board without loosen or not before power on, when Anomaly appeared such as short out, trip,line fire and smoking after move, please turn off the power supply in time and find the reason.

4. Control computer should install virus protection software and junk file cleaning software, Prevent the virus interference screen control software lead to display doesn't work.

Ⅲ. The using of the controlling software

1. Organization professional staff operating control computer. By setting the system password prevents non-full-time staff to operate. Professional staff must be familiar with installation method, raw data recovery, and backup. Master control parameter settings, Basic data preset edit, Skilled using the program, operation and editing. (More details please referred to the clients training).

2. If the condition is allowed, should backup the software for controlling software, such as Windows operation system, application system, software installation system, database and so on.

3. With the condition of controlling system reset the system, please install the reference drive program (Especially the graphics card driver) first.

4. The operating system specific process control software operating process please refers to the manual of various operation system relative chapter Four.

Ⅳ. Routine maintenance

1. Top-tech suggest each customer do periodic maintenance and annual inspection for the controlling computer, peripheral equipment and LED screen, Periodic maintenance cycle is about one month.

2. For computer and peripheral equipment maintenance and inspection should include:

A. Check the integrity of the computer and peripheral hardware;

B. Regular clearing the junk files, Virus scanner, System Backup for the computer.

C. Clearing the Peripherals and computer's body , including the dusty and sundries and so on .(Remember when clearing the computer shouldn't be working).

3. For screen maintenance and inspection should include:

A. The out of control point or module abnormal or not;

B. If the condition is allowed; please check all hardware, including whether steel structure is loosen, whether cable connection is loosen, whether stock is bad, whether there is abnormal noise, whether heat dissipation fans don't work, whether ventilation filters have dust, etc. (Recommend to clear up ventilation filters and heat dissipation fans every 2 months. Don't clean dust and pull out cables when screen is working.

C. Screen testing includes consistent brightness, stable (not flickering) image, pure (not deviated) color.

4. Please resolve all problems timely during periodic maintenance and annual inspection, more details; please refer to the manual of excluding malfunction in this book.

Part Two: The storage of the screen

Ⅰ. The storage of uninstalled cabinets and spare modules

1. Please adopt anti-moisture measures in store area, humidity requirement: less than 90%;

2. Please keep appropriate temperature in store area, temperature requirement: -40℃≤t≤60℃

3. Please avoid the harm of mice and pest in store are, the rats bane can be used if necessary, so does the installed screen;

4. Please avoid the rain or other liquid into the screen or module while in store;

5. Please do cleaning to avoid large dust and debris in store area.

Ⅱ. The usage and storage of screen under special environments.

1. Please adopt proper anti-thunder methods to ensure the release of the strong electricity and magnet, which caused by the thunder and lightning. Please turn off the screen and PC temporarily while on the terrible thunder and lightning weather;

2. Please don't install screen in the area which is easy to accumulate water. Please turn off the screen temporarily in the terrible convection weather, such as typhoon, hard rain, severe snow, and hailstone.

3. Please pay attention to salt corrosion to the exposed metal of screen caused by the air salinity in the coastal areas. Please guarantee the poles anti-typhoon while use poles.

4. Please use special power supply and cabinet in the very low temperature environment where screen can not turn on normally, and the heating device like warm air-curtain can be used if necessary.

5. Please don't keep screen working long time in the very hot environment, and special heat dissipation devices such as fans and air-conditioner can be installed if necessary.

6. Display frame structure must do ground handling

THE MAINTAIN OF LED SCREEN

Tools required:

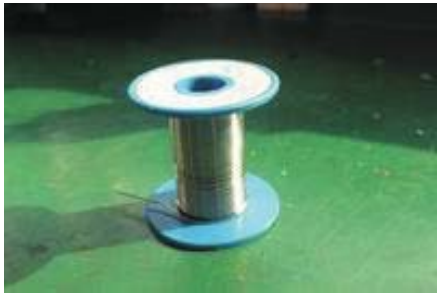
Screw, Multimeter, Tweezers, Iron, Glue, Tin

Screw

Multimeter

Tweezers

Iron



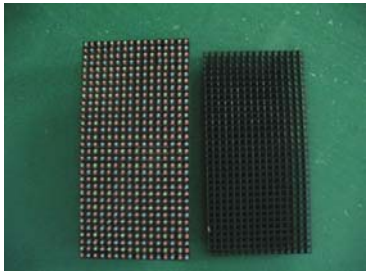
Glue

Tin

Ⅰ.Change outdoor LED

LED lamps don't work or light always, possible is the LED module problem. Please make sure whether the LED lamps problems. Outdoor LED displays please do as the following steps.

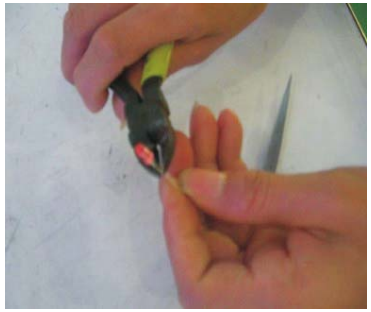
1. Use screwdriver take out the mask screw.



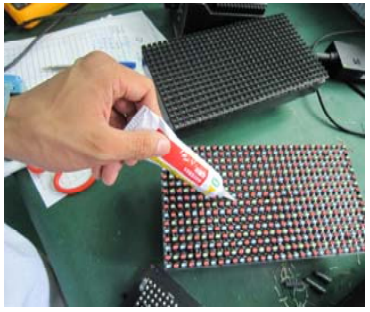
2. Find out the problem LED lamps, test it by multimeter, if it does not work, that is the LED lamp damage.

3. Use tweeze move the glue around this LED lamp, then use iron and tweeze take out the damage LED lamp.

4. Take one spare part LED lamp, and test it by multimeter, then cut the LED pin, keep the length within 6-7mm, and solder it by iron. (Attention please the positive and negative pole, normally the large pin is the positive pole, normally the longer pin is the positive pole, the square hole on the PCB for positive pole)

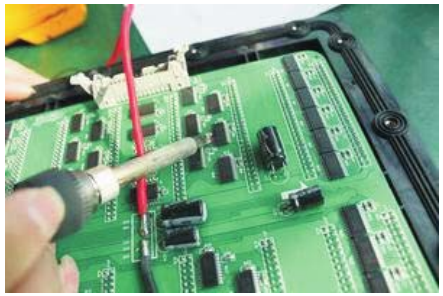


5. Add some glue seal up the LED pin, after the glue dry, assemble the mask.



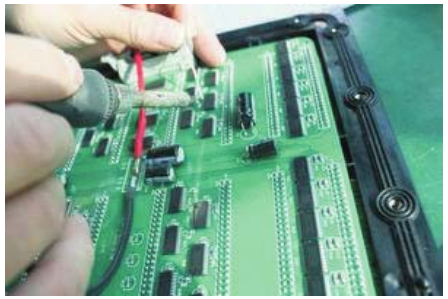
Ⅱ. Change indoor LED lamps and IC

1. Add a little Tin then use iron make all the tin around the Led and IC melt away.



2. Use tweeze take out the LED and IC

3. Take spare part IC or LED, solder together with tin and fixed it on the PCB board by iron.



COMMON FAILURES AND SOLUTIONS OF LED DISPLAY

Index

1. Common Failures and Solutions of the entire LED display

1.1 No displaying on the entire LED display (all black)
1.2 Garbled Displaying on the LED display
1.3 Disordered or Overlapped Displaying on the Entire LED Display
1.4 Twinkling / Shaking Display on the Entire LED display
1.5 No Displaying on Parts of the Entire LED Display
1.6 Not displaying synchronously with the Computer

2. Common Failures and Solutions of LED display

2.1 No Displaying on Single cabinet
3. Common Failures and Solutions of LED Module
3.1 No Displaying on a LED Module
3.2 No Displaying on half of a LED Module
3.3 Rows Missing on LED Module (for scanning Screen)
3.4 Lines missing on LED module (for scanning Screen)
3.5 One or Two Rows of LED Module not work (for static screen)
3.7 Several Modules
3.8 Color Missing On LED Module

4. Common Problem and Solutions of LED Software Settings

4.1 LINSN Controlling System -- Reference to Common Problems and solutions Section,which under LINSN Controlling System Chapter.
4.2 ZDEC Controlling System -- Reference to Common Problems and solutions Section,which under ZDEC Controlling System Chapter.
4.3 DBSTAR Controlling System -- Reference to Common Problems and solutions Section,which under DBSTAR Controlling System Chapter.
4.4 XIXUN Controlling System -- Reference to Common Problems and solutions Section,which under XIXUN Controlling System Chapter.
4.5 LYTECH Controlling System -- Reference to Common Problems and solutions Section,which under LYTECH Controlling System Chapter.

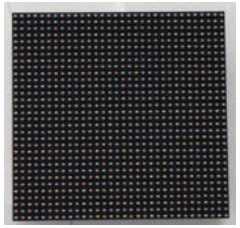
5. Common Problems and Solutions of Normal Equipments Connected to LED Display

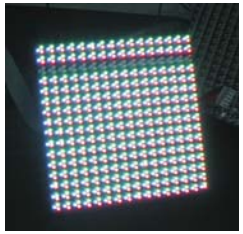
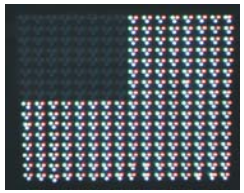
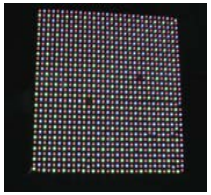
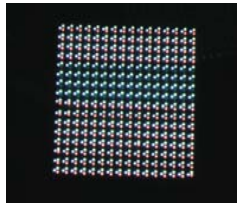
5.1 Video Processor – Reference to Common Problems and Solutions Section under Video Processor Chapter.
5.2 Industrial PC (IPC) – Reference to Common Problems and Solutions Section under IPC.

No.	Failure Description	Picture	Failure Cause	Solutio
1.1	No Displaying on the Entire LED Display(all black)		No AC power input	Check the power supply,turn on the swift of power distrubutor,the power indicator should be on.
			PC is not started up	Start up the PC,open the LED studio software.
			Signal cable break down(internet cable)	Check the signal cable. Reconnect it until the green indicator twinkling as normal.
			Controlling system break down(Sending card)	Check if the sending card is working normal(green indicator twinkling,red indicator keep lighting).If the green indicator is off or keeps lighting,it means there is no signal(if the indicator is off). Sending card will very seldom break down. If it truly breaks off,please change the sending card.
			Receiving card is not power on	Check the receiving card input voltage DCSV,check if the first receiving card is working normal.
			DVI cable not connected	Power off the computer and reconnect the DVI cable.
			DVI card setting mistake	Setting up the LED studio software and reconnect the signal cable according to the Controlling System Operation Steps(see the Controlling System)
1.2	Garbled Displaying on the LED Display		Controlling System breaks off (Sending/Receiving Card)	Check if the sending card and receiving card is working normal(green indicator twinkling,red indicator keep lighting). If the green indicator is off or keeps lighting,it means there is no signal if the indicator is off,it maybe also because its power is off. Sending card will very seldom break down. If it truly breaks off,please change the sending card.
			LED studio setting mistake or Signal cable connected wrongly	Setting up the LED studio software and reconnect the signal cable according to the Controlling System Operation Steps(see the Controlling System Operation Manual)
1.3	Disordered or Overlapped Display on the Entire LED Display		Wrong connection between Cabinets or Signal Cable(flat cable)misconnected	Reconnect the signal cable according to the Controlling System Operation Steps(see the Controlling System Operation Manual)
1.4	Twinkling/Shaking Displaying on the Entire LED Display	Dynamic Problem,No picture)	Ground Wire break down	Check the connection between whole screen and the ground wire.
			Controlling System breaks off(Sending/ Receiving card)	Check if the sending card and receiving card is working normal(green indicator twinkling,red indicator is off or keeps lighting,it means there is no signal if the indicator is off,it maybe also because its power is off). Sending card will very seldom break down. If it truly breaks off,please change the sending card.
			Wrong voltage for Controlling System	Controlling system input voltage DC 5V.
			Loss of signal in Signal cable(internet cable)	Check the signal cable(internet cable),reconnect the cable.
			LED studio Setting has problems	Reset the LED studio software setting according to the LED software Manual.
			DVI card setting mistake	Reset the DVI setting according to the Controlling System Operate Manual.

1.5	Garbled Displaying on the LED Display		Controlling System breaks off(Sending/ Receiving card)	Check if the sending card and receiving card is working normal(green indicator twinkling,red indicator keep lighting). If the green indicator is off or keeps lighting,it means there is no signal if the indicator is off,it maybe also because its power is off). Sending card will very seldom break down. If it truly breaks off,please change the sending card.
			LED studio setting mistake or signal cable connected wrongly.	Setting up the LED studio software and reconnect the signal cable according to the Controlling System Operation Steps(see the Controlling System Operation Manual)
			Controlling System breaks off(Sending/ Receiving card)	Check if the sending card and receiving card is working normal(green indicator twinkling,red indicator keep lighting). If the green indicator is off or keeps lighting,it means there is no signal if the indicator is off,it maybe also because its power is off). Sending card will very seldom break down. If it truly breaks off,please change the sending card.
1.6	Not Displaying Synchronously with the Computer		DVI card setting mistake	Checking the DVI card setting,the multiple display mode should be “duplicate”.

No.	Failure Description	Picture	Failure Cause	Solutio
2.1	No Displaying on Single Cabinet		Power Supply Break down	Check if the power supply of cabinet is working normal.
			Receiving Card break down(No displaying on the lsat cabinet)	Check if the receiving card is working normal (green indicator twinkling,red indicator keep lighting). If the green indicator is off or keeps lighting, it means there is no signal(if the indicator is off,it maybe also because its power is off). If it truly breaks off,please change the receiving card.
			Signal cable connected wrongly	Check the signal cable connection between cabinets and reconnect.

No.	Failure Description	Picture	Failure Cause	Solutio
3.1	No Displaying on LED Module		Wrong Module input voltage	Module input voltage should be SV or 3.3V.
			Input Signal cable(flat cable) not cannect well	Reconnect the input signal cable(flat cable)
			Input Signal cable(flat cable)break down	Change the input signal cable(flat cable)
			74HC245 IC break down	Change 74HC245 IC
3.2	No Displaying no half of LED Module		74HC245 IC short-circuit	Clean the short circuit point or change 74HC245 IC.
			The First driving IC(i.e.MBI5.24) at the failure place short-circuit）	Clean the short circuit point or change 74HC245 IC.
			LED studio setting mistake or Signal cable connected wrongly	Setting up the LED studio software and reconnect the signal cable according to the Controlling System Operation Steps(see the Controlling System Operation Manual)

3.3	Rows Missing on LED Module(for Scanning Screen)		74HC245 IC short-circuit	Clean the short cirsuit point or change 74HC245 IC.
			Chip 4953 or HC138 short-circuit	Check related the chip 4953 and HC138 and clean the short circuit point or change chips.
3.4	Lines Missing on LED Module(for Scanning Screen)		The driving IC(i.e. MBI5.24) short-circuit	Clean the short circuit point or change IC (MBI5.24)
			The Line Resistance break down	Change the resistance.
3.5	One or Two Rows Missing (for Static Screen)		The driving IC(i.e. MBI5.24)short-circuit	Clean the short circuit point or change IC (MBI5024)
			External Resistance break down	Change the resistance.
3.6	Single Pixel		LED lamp break down	Change the LED lamp.
	Missing Dark, or Twinkling (for Static Screen)		The driving IC(i.e. MBI5.24)short-circuit	Clean the short circuit point or change IC (MBI5024)
3.7	No Displaying on Serveral Modules		Signal cable not connect well(No displaying on a row of modules	Check the signal cable connection and reconnect,also check the power supply for the first module in the row.
			Power supply not connect well(no displaying on one corner of a cabinet.	Check if the related power supply is working normal and the connect is good.
3.8	Color Missing On LED Module		Signal cable not connect well(color missing a row of modules)	Check the signal cable connection and reconnect,also check the power supply for the first module in the row.
			Module break down(color missing on Single module)	Change module.
			Module break down or flat cable not connect well(Color missing on part of the modulese)	Change the module or reconnect the flat cable.

TOP TECH AFTER SALES PRINCIPLE

1. 2-year warranty with lifelong maintenance.

2. Free warranty (including labor and materials): Free of charge for repairing during 2-year warranty and spare parts and maintenance services will be charged in reasonable price after the warranty period. We are responsible for the problems caused by the product defects.

3. Responding time: after receiving the notice from customer, the uninterrupted 24 hours after-sales technical support will be provided.

4. Spare parts: necessary spare parts are provided along with the products.

5. Free technical training: free technical training is provided to ensure the customers are capable of operating the device, using the software and detecting and solving some basic problems.

6. Telephone interviews: the after-sales department will follow up the device working state by telephone interview monthly to detect and solve the problems instantly.

7. Software upgrade: offering lifelong maintenance and constantly software upgrading service of the control system.

8. Providing guide services for local installation.

修改日期：8 月 30 日